DOCUMENT RESUME

ED 347 644 EA 024 086

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TITLE The Implementation of Management Reforms: The Case of Sri Lanka. BRIDGES Research Report Series, No. 11.
INSTITUTION Harvard Univ., Cambridge, MA. Inst. for International Development.
SPONS AGENCY Agency for International Development (IDCA), Washington, DC.
PUB DATE Feb 92
CONTRACT DDP-5824-A-5076
NOTE 55p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Centralization; *Decentralization; *Educational Administration; Educational Change; Elementary Secondary Education; Foreign Countries; School District Autonomy; *School Organization; *School Restructuring
IDENTIFIERS BRIDGES Project (Harvard University); *Sri Lanka

ABSTRACT

Educational reforms implemented in Sri Lanka in the early 1980s are examined in this paper, which focuses on three broad areas: restructuring reforms; the principal's role; and school-community reform. The research project was carried out by Basic Research and Implementation in DevelopinG Education Systems (BRIDGES) of Harvard University (Massachusetts). Four studies derived data from a stratified cluster sample of 273 schools--two quantitative studies focused on division/cluster reforms and school management practices, one case study examined classroom management, and one combined quantitative and qualitative methods to investigate school-community relations. Questionnaires and analysis of student achievement scores provided additional data. Findings indicate that successful implementation of reform depended on the nature of change required, the ways in which the reforms were introduced, and the extent to which support was maintained. Reforms fostered a more active principal role, but reduced school autonomy. Schools with principals taking a more active leadership role experienced improved student achievement. A conclusion is that educational improvement is possible, even in the context of budget constraints and political conflict. Obstacles included personnel policies that allowed frequent rotation of key personnel, reforms requiring joint action, and bureaucracy's reluctance to help the most needy schools. Twenty-six tables are included. The appendix explains the research design and sampling process. (43 references) (LMI)

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Basic Research and Implementation in DevelopinG Education Systems

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and the Office of Education, Bureau for Science and Technology,
United States Agency for International Development

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The BRIDGES Group includes educators, researchers, planners and policymakers committed to improving opportunity and quality in Third World schools. The goal of their collaborative effort is to identify policy options that will increase children's access to schooling, reduce the frequency of early school leaving and repetition, improve the amount and quality of what is learned, and optimize the use of fiscal and educational resources.

The *BRIDGES Research Report Series* is edited by the Harvard Institute for International Development. The *Series* is a collection of reviews of the state-of-the-art in research, and original research reports on basic education in developing countries. Each review summarizes research about a particular policy issue and suggests policy options. Original reports on BRIDGES-sponsored research present new information about the impact and costs of specific alternatives that the reviews have identified as most promising.

The views expressed in this document are those of the author and do not necessarily reflect those of the United States Agency for International Development.

The Implementation of Management Reforms: The Case of Sri Lanka

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Acknowledgements
This study benefited from an excepticnal degree of cooperation from a large group of Sri Lankan and overseas researchers. Central to the core management study was a group ably coordinated by Mrs. K. Dharmawardena and including Mr. W.M.K. Undugoda, Mr. K.O. Piydasa, Mr. R.S. Medagama, Dr. Upali Funasekara, and Mrs. F.M. Fernanco. Dr. R. Navarro and Dr. W. Chang also made important contributions to this study. The section on community participation was originally conceptualized and published separately by a group composed of Dr. N.G. Kularatna, Mr. K.H. Dharmadasa, Mr. S.B. Ekanayake, Mr. W.M. Piyadasa, Mrs. A.W.P.M. Wijekoon, and Dr. Mary Anderson; we have drawn on their work in the preparation of this study. Michiko Matsumoto and Mrs. Manjula deserve special recognition for their careful work in data management. Our special thanks go to the former Secretary of Education, Mr. Wijemanna, whose generous invitation and continuous support made this study possible. And we thank the excellent BRIDGES editorial staff led by Billie Jo Joy for enhancing the clarity of the final report.

Foreword

This study makes three important contributions to educational policy in developing countries:

- a conceptualization and description of practices of school principals;
- a further de-mystification of the process of decentralizing school management; and
- further understanding of how to implement centrally-planned reforms.

Prescriptions for how school administrators should behave are common, but we have few descriptions about what they actually do, and even less information about which administrative practices are most effective. The authors analyze both determinants of principal behavior, and its consequences. There is some good news in the analysis — training of principals does affect what they do. For example, principals can be trained to establish closer relationships with their communities. Community support of schools in some cases is appreciable; especially in small, rural schools the behavior of the principal is critical to the generation of this support.

But like many of the findings in this study, the relationships are complex, dependent on other factors. Principals are more effective when they live close to school; usually these principals are more committed to their work. But if they live too close to school, they are more likely to get embroiled in local politics, which then undermines their effectiveness.

To be effective, "decentralization" requires increasing the competence, and sometimes the authority, of the central ministry. Merely increasing the autonomy of schools does not always work. Thus the authors suggest abandoning the concept of "decentralization" in favor of the term management reforms. It is through this kind of analysis that the report contributes to de-mystification of decentralization.

Management reforms are necessarily centrally planned and directed, even when a primary objective is to increase local participation in decision making. Without strong and competent central government leadership, efforts to move decision making closer to the people affected by them can end up re-concentrating power.

...the study confirms our belief that the effectiveness, and efficiency, of the schools can be increased by moving critical decisions closer to the scene of action.

The study calls attention to a key concept taken from classical organizational theory: span of control. Span of control refers to the number of agencies that are supervised by a superior agency. If the span of control is too large, the supervising agencies cannot do their job well. Many countries have a school inspectorate system in which supervisors are unable to help improve teaching because they are responsible for too many schools. To solve this problem, some countries have created a new layer of authority in between the district supervisor and the school. The sub-district officers may be responsible for as few as ten schools, which permits an active program of inservice training in each school.

Scope of control, which is not mentioned directly in the paper, refers to the kinds of authority held by each agency. In Sri Lanka, each new layer of the organization has to be assigned responsibilities appropriate for that span of control. This is a difficult analytic task, and failure to do it well creates more "bureaucracy", in the pejorative sense of that term. The Sri Lanka study indicates how the central ministry went about determining which authority to give schools, which to sub-districts, which to districts, and so on, and how these ideas (and the reforms) changed

during implementation. It also suggests ways in which the reforms failed to achieve the objectives set for them. For example, small rural schools appear to have benefited least from increased autonomy. The schools that most needed assistance, and which benefited most from it, were least likely to be affected by the reform.

For all that, the study confirms our belief that the effectiveness, and efficiency, of the schools can be increased by moving critical decisions closer to the scene of action. The Sri Lanka reforms trained school principals, and then required them to develop their own plans for school improvement. The result was noticeable changes in the principals' behavior— more emphasis on instruction, greater teacher involvement in curriculum development, and higher standards for school performance.

In a complex society, there are in fact many 'centers' of power, and highly diverse communities to be served. We should be in a hurry to get started on reforms—there is much to be done. We should frequently monitor progress—and change our plans when they do not work. But, we should also be patient—reform is a slow process. To be successful we must reach all the far-flung corners of the systems that up till now have been neglected. With time, as the Sri Lankans have learned, it is possible to make even a good educational system better.

Noel F. McGinn
February 9, 1992

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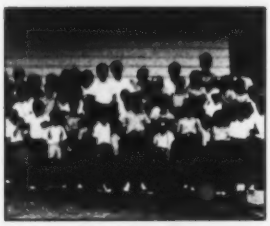

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Executive Summary

This paper examines seven educational management reforms carried out in the early 1980s by the Sri Lankan Ministry of Education. Though varying in focus, the reforms were characterized by several common themes. The reforms viewed the school as the primary locus of educational change. All of the reforms were designed, in different ways, to provide schools with better support. The reforms recognized the pivotal role of the principal in mediating between the educational bureaucracy and the school, in relating to the community, and in providing instructional leadership. The reforms were implemented within existing budgetary constraints. As such, Sri Lanka's experience with reforms may be of interest to educators and policymakers in other countries with similar challenges.

Reforms with sustained support from the bureaucracy and those requiring relatively simple changes with few actors were most successful.

The research reported here, which was a collaborative effort by researchers at the Sri Lankan National Institute of Education and the Harvard Institute for International Development, focuses on three broad areas:

1. **Restructuring Reforms;** designed to strengthen the relations between schools and the bureaucracy and among schools.

2. **Principals' Role Reform;** designed to foster greater initiative and leadership on the part of school principals, particularly in relation to the schools' instructional program.

3. **School-Community Reform;** designed to improve relations between schools and communities and to encourage communities to provide schools with greater levels of support.

Our research found that the success of Sri Lanka's reforms depended on the nature of the change required, the ways in which the reforms were introduced, and the extent to which support for the reform was maintained. Reforms with sustained support from the bureaucracy and those requiring relatively simple changes with few actors were most successful.

The reforms had different impacts on different types of schools. Small, isolated, rural schools benefited most from increased communication brought about by clustering and by locating bureaucratic offices closer to the schools. Larger, ambitious schools benefited most from closer ties with the central bureaucracy which supported principals' training and the restructuring reforms.

Principals' management training seems to have fostered a more active role for principals in terms of improving relationships within schools, among schools, and within communities. However, in relation to the central bureaucracy, the reforms appear to have reduced school-level autonomy.

Communities were willing to provide schools with financial or in-kind support, especially when led by strong principals who were committed to visible school improvements.

Reforms that increased the principals' instructional leadership role were found to have the greatest impact on student achievement and grade repetition. Students achieved the most, and repeated less, in schools where principals took an active role in developing instructional goals and in working with teachers to improve instructional quality.

Perhaps the most hopeful general finding of this study is that educational improvement is possible, even in the context of severely constrained budgets and political conflict. Rather than increasing financial inputs to the system, Sri Lanka concentrated on finding ways in which existing ideas and commit-

ments could be used more effectively. Relations within the bureaucracy and among schools were restructured to provide greater communication. Isolated schools were brought into greater contact with the system. The leadership role of principals was enhanced through broad bureaucratic support and principals' training. Communities were mobilized to provide additional moral and material support.

This report describes in a general way Sri Lanka's experience with reform. Section I outlines the general perspective and conceptual framework for the study. Sections II and III detail the context of reform and the various reform initiatives examined in the research. Sections IV, V, and VI focus on specific reforms: the restructuring reforms, the principal's new role, and school-community relations, respectively. Section VII looks at the impact of the reforms on pupils' achievement and grade repetition. Section VIII discusses the implications of Sri Lanka's experience with reform. Details of the research design are provided in the Appendix.

Section I: Introduction

Interest in reforming educational management has been sparked in recent years by 1) a growing recognition of the limitations of centralized systems, both in promoting quality and generating revenue; 2) the desire for local control by newly enfranchised political groups; and 3) new insights into the way large organizations work.

The Limitations of Centralization

In the decades since World War II a number of nations have achieved independence and sought to build new education systems that are consistent with their national goals. The concern for universal access has led governments to promote rapid expansion, particularly at the primary level.

...any program for shifting the financial burden also had to confront issues of control and management.

Typically, these nations have inherited complex educational systems that were set up by colonial authorities to maintain inequities among different classes and racial groups. Thus, one of the early steps in educational reform was to make the education system more equitable by making curriculum, examinations, personnel regulations, etc., subject to a central authority. Centralized bureaucracies expanded to perform these new functions, although largely following the form of the old colonial bureaucracies.

• **Management Problems.** These various reforms promoted a common national ideology and expanded educational opportunities. But as the central government attempted to control more of the educational process, it often became bogged down in red tape and inefficiency, and these failures led to apathy and corruption.

It is not too difficult to understand what has gone wrong. Central government has tried to take on too much too fast. Top officials have become responsible for more than they can manage. Lines of authority have become blurred.

Remedies, such as multi-layered planning, strategic planning, and clarifying the chain of command have been regarded as ways out of the bureaucratic quagmire, but they fail to address weaknesses in the lower levels of the bureaucracy. Since the late seventies, a number of nations have attempted the more radical approach of decentralization, or management reform.

• **Revenue Shortages.** On top of these management problems, many governments lacked sufficient funds. The oil crisis and the subsequent sharp rise in the cost of borrowing money put many developing countries in debt. To balance their budgets, these governments began to cut various programs, including education programs. Since the seventies, the real expenditures for education have declined in one-quarter of developing countries, in spite of the increasing demand for educational services (Lewin & Little, 1982; Reimers, 1991).

In the face of this contradiction, many governments explored new ways for generating revenues for education, including shifting the responsibility for generating revenue to local governments. But of course, any program for shifting the financial burden also had to confront issues of control and management. In India, for example, growing pressure on the national budget led to a progressive shift toward financing education by state and local governments. As a consequence, local bodies became more assertive in curriculum development and other areas of educational policy, their motto being: "No support, no control." In several states, local languages became the primary language of instruction.

Ethnic Empowerment

A new wave of political developments best described as ethnic empowerment followed on the heels

of these managerial and financial challenges. In India, major separatist movements were launched by the Kashmiris, Punjabis, and Tamils. In the Philippines, the Muslim minorities increased their claims for regional autonomy, as did the Kurds in Iraq. In the Soviet Union, the Estonians and Latvians revolted. The list is quite lengthy. Strong central governments once sought to rebuff these movements, but in several of the above instances they decided instead to delegate some control of educational (and other) services to local governments in return for financial help.

In Sri Lanka, after nearly a decade of guerilla warfare between the government and a militant separatist Tamil group, a new constitution was framed in 1990 which divided the nation into ten provinces. Each province now has a separate legislature, administrative service, and revenue-generating capability. Primary responsibility for educational policy has shifted to the provincial governments. The two provinces on the northern and eastern corners of the island are largely settled by Tamils and have declared Tamil the language of government and education. De facto, the nation is being carved into two separate spheres weakly linked by a national parliament which focuses on foreign policy.

New Developments in Management Theory

Over the past several decades there have been significant developments in approaches to managing large organizations such as educational systems (Lawrence & Lorsch, 1967; Scott, 1978; Pffefer & Salancik, 1978; Pressman & Wildavsky, 1984). Three major trends emerge:

- The dawning realization that organizations are not closed systems, but open systems which are usually penetrated by diverse community and economic interests.

- The recognition that decisions can no longer be made according to established rules and plans, but that social values and changing environmental contingencies have to be continually factored in.

- An appreciation of the importance of extensive communication with and participation by those who will be affected by the proposed changes, as opposed to the idea that implementation will automatically take place from the top down.

Decentralization or Management Reform: Clarification of Terms

The main goal in recent thinking about reform has been to shift many managerial responsibilities to lower levels of the educational system, and therefore many of these reforms are said to be decentralizing. But decentralization in operating and even financing schools has been accompanied by an increase in central monitoring and supervision. Therefore the more comprehensive term of "management reform" will be used in this paper to describe the recent changes.

In a recent comparative study of decentralizing reforms, McGinn and Street (1986) urge a recognition of the political tensions and rivalries among the various groups that support a centralized state. The three examples of reform they review involve attempts by key members of the ruling coalition to circumvent the power of other groups. For example, in Mexico, the top levels of the Ministry of Education sought to decentralize so as to work around, rather than through, a well-entrenched central bureaucracy. The reformers cloaked their political strategy in the currently popular ideology of decentralization for the sake of "benefiting" society and "promoting efficiency".

What is particularly notable in recent decentralizing reforms is a concern to strengthen accountability through performance indicators such as increased learning and reduced repetition. The implementation of the new national curriculum in the United Kingdom in 1988 is the prototypical example. Similarly, a national system of achievement tests in Thailand now monitors the performance of school districts and schools. Personnel are assigned and promoted based on their local performance (Wheeler, et al., 1989).

Recent Experiences with Management Reforms

Stimulated by ethnic empowerment and developments in management theory, a number of educational systems have launched management reforms. The BRIDGES Project[1] has identified fourteen cases that are reasonably well documented (see Table 1).

1. For more information about Project BRIDGES please refer to the inside cover of this report.

Table 1. Recent Instances of Management Reforms

Bangladesh, '80s **Supervisors** **Lockheed & Verspoor, 1990**
A group of Upazilla Education Officers were appointed to intensify supervision through both scheduled training sessions and surprise visits. Teacher absenteeism was significantly reduced.

Colombia, mid-'70s **Escuela Nueva** **Rojas & Castillo, 1975**
The government developed a new multi-grade approach to basic education called Escuela Nueva which involved strong participation. A parent committee worked with the student council on joint projects to improve the school and curriculum. Escuela Nueva has led to significant increases in access, educational quality, and student self-esteem.

Costa Rica, mid-'70s **Nuclearization** **Olivera, 1983**
To overcome the dismal state of rural schools, networks of five schools were linked in "nuclei" to share a library, teaching aides, workshops, and certain administrative services. Nuclearization helped to empower and motivate teachers, and resulted in a curriculum more relevant to local needs.

India, '80s **Multi-level Planning** **Mathus, 1983**
With the sixth Five Year Development Plan (1981-86), India shifted major responsibilities for the planning and implementation of educational programs to the district level. The shortage of personnel and the separation of educational planning from that of other sectors have prevented the full benefits of this shift.

Madagascar, late '70s **Regional Offices** **Razafindrakoto, 1979**
The 1975 Constitution recognized communities as the basic unit of government. Each community was expected to build a primary school and develop syllabi responsive to local needs. With the central government subsidies for school construction, significant increases in primary school enrollments were achieved.

Malaysia, '80s **Training** **Lockheed & Verspoor, 1990**
The National Institute of Educational Management was established to improve the planning and management capabilities of school managers. The Institute was able to develop an inexpensive and popular set of courses that attracted far more applicants than originally anticipated.

Mexico, '80s **Decentralization** **McGinn & Street, 1986**
An official program to transfer control of funds to the state level was found to have little impact on the actual operation of schools. The reform was introduced to strengthen the power of the new government vis-a-vis state educational officers, as a way to circumvent the entrenched bureaucracy.

Nigeria, '80s **Community Schools** **Okeye, 1986**
Facing a rising demand for secondary education and declining revenues, the state acceded to community requests to build their own schools. The communities were able to build the schools at low cost through voluntary labor and donated materials. The outcome was a rapid but geographically uneven expansion of secondary education.

Papua New Guinea, late '70s **Clusters** **Bray, 1987**
The primary responsibility for planning and construction of schools was shifted to the provincial level. Given significant variations in regional resources, this has heightened regional inequalities in access to education, and in quality.

Peru, '70s **Micro-planning** **Ruiz-Duran, 1983**
In 1972 Peru was divided into Community Education Nuclei, (25 schools per nucleus), where important planning and administrative decisions were to be made. However, lack of power, funds, and appropriate training for staff disabled their ability to take on new responsibilities.

Sri Lanka, '80s **Clusters Reorganization** **Bray, 1987**
Clusters of between 10 - 15 schools were established and cluster principals appointed to coordinate resource sharing, joint training, and intermural activities. The change improved student achievement in the weaker schools.

Swaziland, '80s **Training** **UNESCO, 1987**
To improve the performance of a recently privatized system, a program of headmasters' training was established to improve school-based skills in financial and resource management, curriculum development, and evaluation.

Tanzania, '70s **Integrated Planning** **Mapuri, 1983**
Integrated planning for all sectors, including education, incorporated inputs from a decentralized administrative structure to local village councils. To help carry out the plans, village councils were given power to raise revenues and recruit personnel. The reform had a positive impact on school enrollments, but suffered from a shortage of capable personnel and administrative ambiguities.

Thailand, '80s **Training, EMIS** **Wheeler et al., 1989**
A selected group of "effective" principals developed an inservice training course for their peers which involved modules, videos, slides, and practical exercises. This course was administered at the district level to all school principals. Principals who failed a post-training test had to repeat it until they were successful. Principals were later monitored to see if they practiced the course objectives.

In all of these cases, the explicit objective was to improve the efficiency and quality of education, but it is difficult to determine from the field reports whether much was accomplished. However, there are some encouraging findings. For example, a study in Thailand shows that management reforms are a major factor behind a 20% nationwide improvement in educational achievement over a four year period (Wheeler, et al., 1989).

Thus, a recent review of decentralization policies cautions against hasty conclusions about their efficacy:

> No one has demonstrated conclusively that decentralization actually solves the problems noted earlier, or that it is necessarily more cost-effective than centralization. The study shows that decentralization is not a 'quick fix' for the management problems of developing countries. The factors that make it such an attractive policy are usually the same ones that make it difficult to implement. In general, we found little evidence to contest the conclusions of a United Nations assessment that the 'actual impact of decentralization for effective administration has been very limited' (Rondellini et al., 1990).

The Challenge of Implementation

While many reforms have been launched, we still do not fully understand what it takes to bring about a successful management reform. Mark Hanson's (1985) fascinating comparison of educational reform in Colombia and Venezuela from 1968 to 1982 highlights the penchant for governments to give up on management reform somewhere between the "grand design" and the implementation stage. He provides a revealing observation from Venezuela's former Minister of Education Luis Manuel Penalver:

> There is a negative factor that we must confront because it affects everyone, including ourselves. This factor is a resistance to change. When new ideas are proposed regarding the reform of methods and programs, everyone is in agreement. But when attempts are made to put these changes into effect, and the changes impact on the routine of those who direct the activities of teachers and administrators, then open resistance develops. A passive resistance is worse because it can result in a simple filing and forgetting of the directives. The length of time required to carry out directives is an expression of the lack of confidence in the changes (Hanson, 1985).

Also interesting is Hanson's finding that the availability of financial resources may detract from, rather than contribute to, persistence in implementation. Other qualities, such as determination and willingness to compromise, may be far more critical to reform than the availability of funds.

Despite the recent surge of interest in educational management reforms, there is still a shortage of studies about the connection between the success of a policy and the conditions under which is implemented.

Using the Sri Lankan case study of management reform implementation this paper seeks to provide some insight into the challenges faced by a government when implementing management reforms in a context of scarcity.

The Sri Lanka Case

Sri Lanka's experience with educational management reform provides a useful perspective on how reform might be planned and implemented in other contexts. Most developing education systems share with Sri Lanka an overburdened central bureaucracy, an expanded and heterogeneous school system, disparities in educational quality, resistance to change, and severely constrained budgets. Instead of constructing new buildings and establishing new layers of bureaucracy, the Sri Lankan reforms concentrated on low cost ways to improve the system by changing the relations of actors already in the system.

The reforms involved a fundamental restructuring of authority, away from both the overburdened center and from isolated individual schools, toward lower levels of the bureaucracy. The reforms envisioned new roles for the educational bureaucracy, for school principals, and for the community. The bureaucratic management role was shifted away from an "enforcement" model toward a role more supportive of school-level efforts. At the same time, local school principals were asked to assume greater leadership at the school level and greater responsibility for providing education to all students in their locales. Though the reforms encountered considerable resistance, in places where they were effectively in-

troduced, they improved the quality and efficiency of education.

The Secretary of Education, midstream in the reform process, decided to evaluate what was going on. In 1986 he invited a group of U.S. educators under the auspices of Harvard University's Project BRIDGES to collaborate with the National Institute of Education to assess the quality and efficiency of Sri Lankan education. Through a review of seven major reforms this paper seeks to understand important policy variables that effect implementation. Areas of research, research design, sampling, and methodology are elaborated in the Appendix.

Section II: Historical Context of Education Reforms

Before the arrival of European settlers, Sri Lanka had an extensive system of indigenous schools conveying both the Buddhist and Hindu heritage. The Europeans largely ignored and even discouraged these schools while setting up new institutions to serve their own interests. The Portuguese, and later the Dutch, initiated the first foreign educational institutions, but in the late 18th century the British gained political control and established the contemporary systems.

• **A Heritage of Dualism.** The top institutions in the British system were the Superior Schools, which were modeled on the English public school. These schools were initially funded by overseas religious institutions to establish a base in the country for the spread of their religions. In 1880 when external examinations given in the English language became the basis for advancement to higher education and civil service employment, the Superior Schools became clearly demarcated as the training grounds for the local elite. Established in the urban centers of Colombo, Kandy, Galle, and Jaffna, the Superior Schools offered a full curriculum from kindergarten through collegiate Advanced Level courses.[2] Charging substantial fees and drawing on substantial support from religious denominations, alumni associations, and government subsidies, they were managed by Boards of Directors who maintained direct contact with the central government. The Superior Schools maintained an influence far out of proportion to their actual number; only 35 out of approximately 3600 schools in Sri Lanka in 1939 were Superior Schools. Not surprisingly, the Superior Schools tended to serve the interests of the colonial administration.

Parallel with the development of the Superior Schools was the growth of indigenous schools, taught in the vernacular languages, which provided education to the majority of the population in the countryside. Unable to provide the curriculum or facilities of the Superior Schools, this lower tier of popular schools nonetheless provided an outlet for the aspirations of the people and became the basis for the current system. Because of language barriers, however, graduates were ill-prepared for examinations that provided entrance into the elite, modern sector (Jayasuriya, 1969). Unlike the Superior Schools, the indigenous schools were administered and funded by regional and local governments, at much lower levels of support (Jayasuriya, 1971).

The aim of current and past reforms is to bring the poorer schools up to more satisfactory levels of funding and achievement, while maintaining the quality of the wealthier schools.

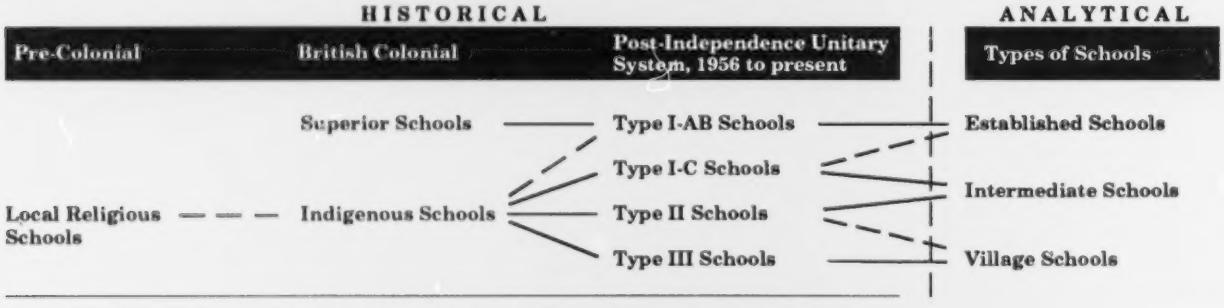
This division–between an elite group of well-funded, academically-superior schools and the majority of smaller, less well-endowed schools–continues to the present. According to the Ministry of Education's statistics, the more affluent districts spend more money per pupil and parents tend to contribute more money to schools. In part, this is why schools in these areas are able to attract and keep more highly trained teachers. Students are more highly motivated, less likely to repeat or drop out, and more likely to go on to advanced levels. At the other end of the spectrum, plantation economies are much less affluent and they tend to have poorly developed schools.

The elite schools dominate the popular imagination of what a school should be, while the less well-endowed schools make up the majority of the system. The aim of current and past reforms is to bring the poorer schools up to more satisfactory levels of funding and achievement, while maintaining the quality of the wealthier schools.

2. In Sri Lanka, students take the GCE/OL (General Certificate of Education/Ordinary Level) at the end of grade 10. Students take the GCE/AL (General Certificate of Education/Advanced Level) at the end of grade 12.

• **Increasing Access.** Soon after independence in 1946, the government enacted a number of reforms that opened schools to the majority of the people and made education free for all citizens. To provide greater access to rural students, the government established a number of large Central Schools, some of which have since achieved the stature and quality of the former Superior Schools. The socialist Bandaranaike government, which came into power in 1956, brought all schools under a unitary system. The government established regulations which ranked schools according to the curriculum they offered, the academic quality and grade level of their students, and the privileges to which they were entitled. (Some privileges were: having a high status principal, being able to offer science, and being able to enroll talented students). The government regulations also ranked principals as higher and lower status according to criteria such as level of education and years of experience. This evolved into the current system of four ranks, in which Type I-AB Schools are permitted to provide a complete curriculum; kindergarten through Advanced Level in all subjects. Type I-C Schools are permitted to offer all subjects except Advanced Level science. Type II Schools are allowed to provide instruction through Ordinary Level examinations, and Type III Schools are allowed to offer only primary grades. (See Figure 1 for a comprehensive interpretation of school distinctions.) With the unitary system, private and denominational schools

Figure 1. Stratification and Development of Sri Lankan Schools



Pre-Colonial Period.

Local Religious Schools

No central coordination. Established and run by local religious leaders in most villages and towns. Supported by local communities. Taught in vernacular. Strong community support.

British Colonial Period.

Little central coordination.

Superior Schools

Established by foreign religious and colonial leaders in major urban areas to train Sri Lankan elite for roles in colonial administration. Modeled on British "public schools." Few in number (35 in 1939). Supported by fees, central colonial government, overseas religious bodies, alumni contributions. Excellent facilities, teaching staff. Administered by boards of directors. Loosely supervised by central colonial government. Offered full curriculum from kindergarten through Advanced Level instruction. Instruction in English. Drew students from entire nation, biased toward urban-dwellers because of expense, language, admissions.

Indigenous Schools

Established and administered by local governments in large towns and regional centers. Many in number (3600 in 1939). Supported by local governments and fees. Variable facilities, teaching staff. Generally lower in quality than Superior Schools. Curriculum copied from Superior Schools, often incomplete. Instruction in vernacular. Recruited local students.

Post-Independence Unitary System.

Type I-AB Schools

Centrally coordinated. Often former Superior Schools. Administered and funded by central government. Permitted to offer full curriculum; kindergarten through A\L and science. Maintained high quality facilities, teaching staff. Language of instruction decided by school, generally English. No fees. Until reforms of the early '80s, contributions not permitted officially. National recruitment; some places had to be reserved for "scholarship students." Highest prestige.

Type I-C Schools

Centrally coordinated. Similar to Type I-AB Schools, kindergarten through A\L. Slightly less well-endowed and prestigious than Type I-AB Schools. No fees.

Type II Schools

Centrally coordinated. Direct administration by regional governments. Permitted to offer kindergarten through O\L. Students recruited from local areas. Less well-endowed and prestigious than Type I-AB and Type I-C Schools. No fees. Usually taught in vernacular.

Type III Schools

Centrally coordinated. Supervised weakly by local governments. Located in small towns and villages. Permitted only primary curriculum. Poor in resources, low in prestige. Often isolated. Instruction in vernacular.

Key:

— — weak transfer

——— strong transfer

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were required to give up their autonomy and join the national system or lose government support. The majority joined the system; fifteen schools remained independent.

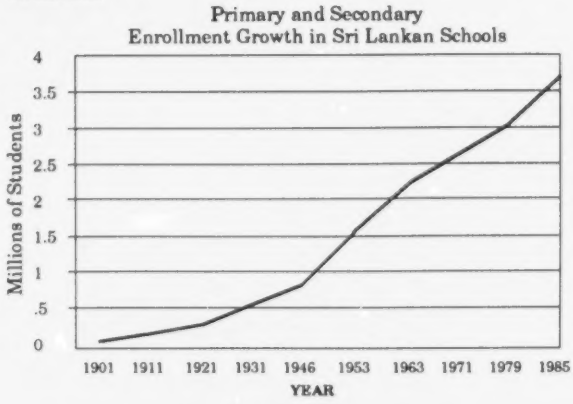
The unitary school system consolidated its operations in several ways. A common curriculum was set up and a single set of textbooks was given free to all students. The government established a National Examination Board and set standards for providing resources. A single personnel system was responsible for employing teachers and principals. Schools were required to admit students on the basis of geographical proximity. Scholarships were established for bright children from poor families. And, whereas prior to the reform instruction in the top schools was in English, after the reform all instruction was to be provided in the vernacular languages of the country, with each school choosing the language in which it would teach.

While this reform paved the way for greater participation by the majority of people, it created yet another division among schools—language of instruction. During the colonial period a disproportionately large number of Superior Schools was established in the Tamil area of Jaffna in northern Sri Lanka. As a result, many educated Tamils obtained influential government positions, which did not please the majority Sinhalese (de Silva, 1986; Liyanage, 1987). In some sense, vernacular instruction was intended to redress such historic imbalances. (By simultaneously shifting the language of government to the vernacular languages of Sinhala and Tamil, Sinhalese became eligible for more government positions.)

- **Expansion.** These reforms led to a tremendous increase in the demand for education, particularly at secondary levels. To meet this demand, the government encouraged schools to increase enrollment, allowing lower-ranking schools to add grades in order to upgrade their official ranking and acquire the privileges of higher-ranking schools. At the same time, however, steps were taken to safeguard the privileges of the older, elite schools. Despite the single personnel system, teachers could not be transferred without their supervisors' permission. A number of older schools were exempted from admissions regulations and only required to reserve a certain number of secondary places for scholarship students. Thus, the elite schools were able, in large part, to maintain their advantage (Jayaweera, 1986).

Enrollments tripled from 1946 to 1979, and the number of schools almost doubled. At present, the Sri Lankan school system is comprised of almost 10,000 schools. The expansion of the system is illustrated in Figure 2.

Figure 2. Enrollment Growth in Sri Lankan Schools



While this growth led to a corresponding expansion in the educational bureaucracy, the basic colonial administrative structure remained virtually intact. By the late 1970s, there was a growing awareness among educators and government officials that the old management system was too centralized and remote. Unable to respond to the needs of many schools, it stifled initiative and needed reform (de Silva and Gunawardena, 1986).

History of Proposals for Reform

During the liberal Jayawardena Presidency, national leaders began to take steps toward reform. In 1979 Parliament created three working committees on education, technical education, and training. The reports of these committees provided the guidelines for the *Education Proposals for Reform* (*EPR*) (Ministry of Education, 1981; Ministry of Education, 1982).

While the working committees were meeting, Parliament authorized the establishment of School Development Societies (SDS), to enable schools to develop more extensive relations with their communities and draw on community resources for school improvement projects. In addition, Parliament authorized a pilot project of school clusters. With the issuance of the *EPR*, a committee was established in the Ministry of Education to report on reforms in the management support system.

Core Themes

By mid-1982, the reform reporting committee completed its draft, which was reviewed by a committee chaired by the Minister of Education, and released as the *Report on Management Reforms* (*RMR*) to education officers throughout the nation. The *RMR* began by emphasizing the need for principals to take the initiative for the instructional programs in their schools. The *RMR* then examined problems at higher levels of the educational management hierarchy. Five themes predominate:

1. **Education First.** The *RMR* repeatedly stressed that system administration and management reform were intended to improve the quality of education. Elsewhere it observed that: "the accountability of school educators should be mainly to their pupils and parents" (*RMR*).

2. **Delegation.** A second prominent theme was the delegation of greater responsibility to lower levels in the system. It was partly for this reason that the *RMR* proposed reducing the size of the central educational bureaucracy by reassigning central officials to district offices or to professional institutes.

3. **Information and Planning.** Another concern of the *RMR* was to develop a more systematic approach for gathering information at all levels to facilitate more effective planning. Lower-level bureaucratic offices, such as the division offices, should have their own planner, and district offices should have a full section which concentrates on planning. A primary responsibility of these offices was to organize schools by groups in geographic zones in order to provide a basis for more effective school-ministry linkage.

Figure 3. Summary of Sri Lankan Educational Management Reforms

CORE THEMES	⊃	REFORM PROPOSALS	⊃	ACTION TAKEN
Education First	⊃	Restructuring of Center	⊃	Regional Office to District Office Circuit Office to Division Office Zones
	⊃	Restructuring of Relationships Among Schools	⊃	Clusters Zones
	⊃	School-Ministry Linkage	⊃	Restructuring of Center
	⊃	Enhance Principals Role	⊃	Training
	⊃	Increase Community Involvement in Schools	⊃	School Projects School Development Societies
Delegation	⊃	Restructuring of Center	⊃	Regional Office to District Office Circuit Office to Division Office Zones
	⊃	School-Ministry Linkage	⊃	Restructuring of Center
Information & Planning	⊃	Restructuring of Center	⊃	Regional Office to District Office Circuit Office to Division Office Zones
Motivating Personnel	⊃	Enhance Principals Role	⊃	Training
	⊃	Increase Community Involvement in Schools	⊃	School Projects School Development Societies
Implementation	⊃	all reform proposals intended to improve implementation		

4. **Personnel.** The *RMR* repeatedly observed that an educational system is no better than the people in it. Since many of the existing personnel lacked organizational skills, the *RMR* proposed various training programs. It also proposed opening up channels for promotion so that younger people could advance through the ranks. In this way the *RMR* hoped to promote greater initiative at all levels of the system.

5. **Implementation.** In a number of places, the *RMR* noted past failures of the management system in translating policies into practice. Thus, the reforms it proposed were intended to improve implementation.

Reforms Reviewed in This Study

The five themes in the *RMR* led to proposals for a number of changes in the management system. In this study, seven of the more important reforms have been selected for detailed examination, and are summarized in Figure 3.

1. **Regional Office to District Office**. Directly below the ministry were 26 Regional Offices of Education (RDE) headed by Regional Directors. The *RMR* reported that the "authority, responsibility, and accountability of the RDE is rather diffused," while "[t]he over-centralization of education administration and development in this office has created a system overload." The reform proposed redefining the functions of the regional office, reorganizing its internal structure by assigning certain functions to sub-regional units (division and cluster), and appointing new staff. Perhaps the most controversial aspect of this reform was to turn over the routine administrative task of assigning and transferring teachers to a Chief Education Officer, thus giving the Director more time to focus on promoting educational innovations.

2. **Circuit Office to Division Office.** In view of the overload at the regional offices, the reform proposed reassigning various administrative functions to lower levels of the bureaucracy. Below the new district level, new division offices would replace the old circuit offices. District offices were to have at least four educational officers instead of only one in the circuit office, and thus would be better able to assist schools. It was also suggested that division offices discharge teacher transfers and salaries.

3. **Zones.** Noting that past reforms had failed through lack of planning, the *RMR* proposed that geographic zones be used for allocating resources and forming clusters.

4. **Clusters.** As early as 1979, Parliament's debate on education had led to a proposal for linking groups of schools in clusters. This proposal was repeated in the *RMR* as a way to encourage schools to share resources and facilities. Principals and teachers in various schools were expected to share their knowledge of pedagogical techniques with each other. In this way, clusters could improve the educational quality of the weaker schools (Sararanayake, 1985; Educational Consultants India Ltd., 1989; Bray, 1987; Wheeler, et at., 1989).

5. **Principals**. While the *RMR* stressed the need for more dynamic behavior at all levels of the system, its earliest and most forceful comments were directed at school principals. The *RMR* proposed that principals become the first line managers of change by devoting more energy to staff development and instructional leadership, and less to routine administration. A new training program was proposed as one means for motivating principals.

6. **School Projects.** A document attached to the *RMR* described some forty innovative development projects, affecting such problems as student absenteeism, teacher discontent, buildings in disrepair, and community alienation. Schools were urged to build one or more of these projects into their annual implementation plans.

7. **School Development Societies.** In the early stages of the reform process, Parliament passed legislation allowing all schools to establish School Development Societies composed of interested community members, parents, and teachers.[3] These societies were to aid communication and cooperation between schools and communities, and allow communities to contribute more directly to the support and management of schools.

3. Ministry of Education, Circular No. 37 of 1-31-1979 titled School Development Societies; superseded by Circular No. 1982/2 similarly titled School Development Societies which was issued on 1-30-1982. Previous ministry regulations restricted community involvement in schools to Parent-Teacher Associations, and limited community contributions as ways of equalizing resources.

Section III: Factors Influencing Implementation of Reforms

The reform initiatives were begun during a relatively quiet period in the presidency of Mr. Jayawardena. Soon after, however, civil war broke out, affecting major parts of the northern, eastern, and southern areas of the island. In large part, the reforms were targeted toward areas where there was no warfare, but the climate of civil strife still had a major impact on the reform process. That the reformers were able to achieve as much as they did under such adverse circumstances speaks for their dedication and desire for change.

The civil unrest also affected the design and implementation of the BRIDGES-Sri Lanka research project, which consequently was forced to narrow its scope to the relatively peaceful western and southern regions of the island.

The reforms were directed at different levels of the management system and had somewhat different objectives. Some were more rapidly and widely introduced than others. The implementation and effectiveness of reforms were directly influenced by factors which operate at the bureaucratic and local levels. This section will examine those variables.

The kind of endorsement that a ministry of education gives a reform helps determine its acceptance by the people in an educational system.

Factors Within the Bureaucracy

We identified six factors within the bureaucracy to help us understand the differential introduction of reforms: form of authorization, sound theory, space for unobstructed change, promotion from the top, consistency of leadership, and simplicity of joint action. The factors are summarized in Table 2.

Table 2. Comparison of Bureaucratic Factors Influencing the Implementation of Reforms

	Factors Influencing Introduction:					
Reform:	Authorization	Theory	Space	Promotion	Leadership	Simplicity
District Offices	+	+	–	++	–	+
Division Offices	+	++	+	+	–	–
Zones	++	++	++	++	++	++
Clusters	+	+	+	+	+	+
Principals	+	+	++	++	+	++
Projects	–	+	+	–	–	++
SDS	++	++	++	++	–	++

Key: – Low Impact; + Moderate Impact; ++ High Impact

• **Form of Authorization.** The kind of endorsement that a ministry of education gives a reform helps determine its acceptance by the people in an educational system. In Sri Lanka, perhaps the most forceful authorization is a Parliamentary law, or failing that, a circular issued by the Ministry of Education. Most of the reforms discussed above were outlined in reports such as the *Report on Management Reforms*, which do not have the same authority as a law or circular. (See Table 3.) Apparently, only the School Development Society was authorized by law. The Principals' reform was indirectly authorized when the Staff Training College was expanded and principals were assigned to the College's courses. Zoning was authorized and implemented at the ministry level by the planning unit. School Projects were authorized by an official letter, which carries less authority than a circular. (Schools are required to file all circulars, whereas principals can credibly claim not to have received particular letters.) Clusters were officially sanctioned by the establishment of a Cluster Development Office within the ministry. The District Office was never formally authorized; instead it was established as a pilot project. The Division Office reform had the least precise guidelines. While the *RMR* vaguely introduced the Division

Table 3. Form of Authorization That Reforms Received From the Ministry

Reform	Authorization
School Development Societies	Parliamentary law
Principals	indirectly authorized by assigning principals to the Staff Training College
Zones	authorized and implemented at the ministry level planning unit
Projects	authorized by official letter
Clusters	officially sanctioned by the Cluster Development Office within the ministry
District Office	never formally authorized, established as a pilot office
Division Office	least precise guidelines, verbal instructions from a top-level official to create a pilot and working model; later the ministry provided a formal description of Divisions

Note:
Parliamentary Law = most forceful authorization
Circular issued by MOE = next most forceful authorization, schools required to file
Official Letter = next level of authorization, schools not required to file
Report on Management Reforms = least authority

Office reform, it was never explicitly described. Instead a top level official developed the outlines of the concept and then gave verbal instructions to four district directors to create pilot projects and develop the concept into a working model. Finally, in 1988 the ministry issued instructions to district officers to establish divisions, and provided a formal description of the office.

• **Sound Theory.** Even if instructions are clear, they will encounter resistance if they fail to make good sense. Some of Sri Lanka's reforms were more comprehensible than others. The concept behind Zones was straightforward—to expand the practice of school-mapping to cover a group of contiguous schools sharing a common ecological niche (e.g., bounded by a river, linked by a road, on the same side of a mountain). Aspects of the District Office reform made rational but not political sense. For instance, why would the head of a district office wish to give up the responsibility for teacher transfers, knowing that politicians and others seek to influence such processes? The Cluster reform may have held positive benefits for smaller schools, but at the expense of more established schools and certain communities. Finally, while the Principals' reform contained many seemingly important components, questions emerged. For example, why delegate responsibilities when a school has fewer than ten teachers? Is participatory decision making wise in the Sri Lankan cultural context? In sum, in several instances the assumptions behind the reforms raised questions, and, in at least a minor way, encouraged resistance.

• **Space for Unobstructed Change.** Space, as used here, refers to the degree to which a reform moves into an unoccupied, as opposed to a developed, organizational or geographic niche. Some of the reforms, such as Zones and School Projects, proposed entirely new procedures or structures. In schools lacking Old Boys' or Girls' Associations or similar alumni groups, the School Development Societies reform encountered little resistance. In the case of the Division Office reform, however, the old circuit office had to be disbanded before the division office could be established. It would have been easy to expand the circuit office and name the circuit officer the head, except that he was often the type of person that the reform intended to replace. The District Offices reform ran into the most substantial "space" problems; functioning regional offices were already in place, and most members intended to stay.

• **Promotion from the Top.** Given the steep hierarchy of the Sri Lankan educational service, the support of the Minister and the Permanent Secretary was essential for success. These officers gave lip service to all the reforms, but expressed private reservations about the Cluster reform, because of the political sensitivity aroused in certain areas and social classes. Similarly, the District and Division reforms were brainchildren of the Additional Secretary. At least one top official was not fully convinced of their value. While certain reforms were viewed somewhat skeptically by the top leaders, the School Development Societies reform received their unwavering support, as did Zones.

• **Consistency of Leadership.** Top leaders may promote a reform, but successful implementation requires day-to-day prodding from lower levels of the bureaucracy. The Additional Secretary, conceptual

architect for several reforms, pushed them through in early 1986, and then took a two year leave to fulfill a long-standing overseas obligation. At the time of his departure, Zones were receiving steady support from the ministry's planning division, and Clusters were being shepherded through by the Cluster Development Division. The Staff College for Educational Administration, which was expected to play a key role in training principals for their new role, was being institutionalized in national administrative codes. The Division and District reforms were also projects of the Additional Secretary; with his departure they lost his backing. Overall, reforms that were institutionalized in the management system fared better than the pet projects of particular individuals.

• **Simplicity of Joint Action.** The more government agencies that become involved in a reform, the less likely it is to succeed. For example, the proposal to have division offices pay teachers' salaries required an official account, which only the Treasury could grant. The proposal failed when the Treasury refused. Reorganizing the district office involved reclassifying several jobs, only some of which were under the Ministry of Education. At the end of field work, neither of the other ministries had agreed to the changes.

In summary, the most successful reform, in terms of speed and extent of introduction, was Zones. First proposed in 1984, by 1987 virtually every school in areas relatively free of ethnic conflict had been zoned. School Development Societies were also established throughout the island, though less than half actually served the intended function. Clusters and Divisions got off to a slow start. Though Divisions experienced a setback in 1986, they were revived in 1988 and now are widely introduced. Perhaps the least successful reform was the reorganization of Regional Offices to District Offices; some offices attempted the reform for a year or so but then reverted back to the former pattern. In 1989, after completion of our field work, regional offices were disbanded and replaced by provincial offices.

Factors Within Schools

While the previous section focused primarily on factors within the bureaucracy, this section discusses the factors that influenced reform implementation at the school level.

The reform documents make general allowances for certain broad differences in schools, such as the number of students or type of secondary program offered. They do not, however, take into account the diverse interests and goals of the various schools. As mentioned earlier, some schools have ties to the elite class, while others offer opportunities to the ambitious middle class. Still others focus on the needs of particular religious and/or ethnic groups, while many smaller schools have close ties with the local communities that built them. Some of these differences clash with the spirit of the reforms. The reform documents also fail to account for the individual concerns of principals and teachers who work in the schools.

Many of Sri Lanka's post-independence reforms have increased the uniformity of resources available to schools—the government provides all textbooks, trains and pays teachers, supervises schools, administers the critical examinations, and maintains buildings. Despite these elements of the unitary system, however, schools vary considerably in their access to resources such as leadership, pedagogical expertise, curriculum, student talent, and community support. The basic divisions are between the elite schools, the small isolated primary schools, and the rest.

While all of the reforms have the potential to change the management and resources available to individual schools, these effects differ, and are beneficial to some and potentially harmful to others. The Division reform, for example, increased school and teacher supervision by supervisory officers and located them closer to most schools. Some schools want this extra advice, others do not. Similarly, the Clusters reform sought to involve principals in planning sessions with other principals to facilitate resource sharing and, in some instances, to authorize a "rational" redistribution of the classes and grade levels provided by member schools. For some schools this means receiving resources or classes; for others it means losing them.

Major Groupings of Schools

The fact is, schools vary in how receptive they are to the ministry's reform efforts (Pfeffer & Salancik, 1978; Aldrich, 1979). As a first step towards understanding this variation, we found it useful to classify schools under three major groupings:

• **Established Schools.** At one extreme is a group of well-established, prestigious schools. Established Schools are large and concentrated in urban areas. They offer the full curriculum, kindergarten through A/L, including science. They are accorded special privileges in terms of recruitment and re-

sources such as libraries and science laboratories. They attract able students from relatively well-to-do families. These students do well on virtually all performance indicators.

• **Village Schools.** At the other extreme is a group of small community-oriented primary schools. Schools of this type are most common in poor rural areas. Village Schools are relatively isolated, and lack the opportunities for mobility available in the larger system. Many are quite new, having been recently established. Poor in resources, Village Schools do poorly on most performance indicators. Depending largely on the leadership of the principal, however, they often play an important role in their local communities.

• **Intermediate Schools.** The majority of schools in Sri Lanka lack both the isolation of Village Schools and the resources and prestige of Established Schools. They are very much involved in efforts to improve their status in the larger system. Some of the larger Intermediate Schools seek to emulate the goals, structure, and practices of the Established Schools. Others prepare students for academic competition and thus achieve a reputation for quality. A number of smaller Intermediate Schools place top priority on increasing enrollments. Still others are relatively content with their existing status and performance, and concentrate instead on other goals. Performance varies widely across schools in this group, though most scores fall in between those of Established and Village Schools.[4] Data in Table 4 highlight the vastly different conditions facing these three kinds of schools in Sri Lanka.

The location of Established Schools in relatively well-off urban and suburban communities promotes close contact with the centralized bureaucracy, while the rural location of Village Schools fosters isolation and poverty. Thus there is a hierarchy of advantage in resources, particularly the leadership resources available to each group of schools. Established Schools have the closest links with the ministry, the greatest access to resources, and the best-educated, highest status principals. Village Schools are the most isolated, the least well-endowed, and the most likely to have principals of low status with little training. Intermediate Schools fall between these extremes.

Table 4. Comparison of Selected Characteristics of Established, Intermediate, and Village Schools

	School Group:			
	Established Schools	Intermediate Schools	Village Schools	Sample Total/Mean
Number	107	1521	355	1983
%	5%	77%	18%	100%
Context:				
% Rural	11%	70%	92%	71%
% Low SES	12%	37%	100%	47%
% Minority	16%	17%	30%	20%
School Characteristics:				
% Type I-AB	100%	0%	0%	5%
% Type I-C	0%	18%	0%	14%
% Type II	0%	27%	12%	45%
% Type III	0%	55%	88%	36%
Avg. Enrollment	1,794	449	70	454
Avg. Age (years)	68	48	29	46
Resources:				
# of Teachers	22	8	3	8
Funds After Teacher Salaries & Community Contribution (Rs)	134	23	59	36
As % of Unit Expenditure	15%	3%	6%	4%
Principal Characteristics:				
% on Permanent Status	83%	54%	46%	54%
% on Sri Lanka Ed. Admin. Service	58%	9%	0%	10%
% A\L or Higher Training	90%	33%	28%	36%
% Live Near School	75%	65%	48%	63%

Kye: Rs=rupee

Differing Priorities of Different Schools

Given these differences, it is not surprising that schools' priorities vary also, as summarized in Table 5. Established Schools emphasize scholastics, a strong co-curriculum[5], teacher training, and facili-

4. For purposes of grouping, we have classified Type I-AB Schools as Established. Small Type II and III schools from low socioeconomic status (SES) areas have been classified as Village Schools. Schools not fitting into the Established or Village categories have been placed in the Intermediate Schools category.

5. Co-curricular activities are an important aspect of Sri Lankan education. These activities are similar to extra-curricular activities in the U.S. education system, including sports, music, art, etc.

ties. Village Schools have more basic objectives: teacher training, improving scholastics, and increasing enrollments. The goals of Intermediate Schools reflect a mixture of priorities, with teaching, co-curricular, and scholastics ranked highly on the one hand and a concern with the community ranked highly on the other. Intermediate Schools are the most ambitious, placing greater priority on status—adding grades—and increasing enrollments than do Established or Village Schools.

Table 5. Goals of Established, Intermediate, and Village Schools

	School Group: Established Schools	Intermediate Schools	Village Schools
Goals:			
Increase Enrollment	36%	63%	46%
Add Grades	28%	38%	30%
Improve Facilities	58%	54%	37%
Upgrade Scholastics	71%	65%	64%
Conduct Teacher Training	59%	73%	52%
Improve Co-Curriculum	70%	68%	35%
Improve Relations with Community	51%	74%	30%

Note: Principals were asked to indicate which of the above goals they included in their annual school plans, choosing as many as applied.

Relationship Between School's Goals and Implementation of Reforms

• **School Projects.** The differing goals of different types of schools also affect the kinds of school projects they implement. Using interview data researchers reported principals' plans to incorporate school projects. (Refer to Table 6.) The high priority that Intermediate Schools place on teaching, enrollment, and school-community relations is reflected by their implementation of teacher, student, and community-related projects. Village Schools, oriented to students and the community, put most effort into improvements in those areas. Established Schools work to improve their co-curriculum and facilities. Overall levels of aspiration, combined perhaps with the availability of resources, seem to affect the degree to which schools act on their goals. The most ambitious group, the Intermediate Schools, show the highest overall rate of implementation of school projects. Village Schools implement the fewest projects.

Table 6. Project Implementation by Established, Intermediate, and Village Schools

	School Group: Established Schools	Intermediate Schools	Village Schools	Sample Mean
% Specific Projects Implemented:				
Students	15%	20%	18%	19%
Teachers	14%	17%	6%	14%
Materials	14%	11%	2%	9%
Buildings	21%	20%	8%	18%
Co-Curricular	21%	18%	5%	16%
Guidance	10%	6%	1%	5%
School-Community	23%	25%	15%	23%
% Total Projects Implemented	17%	18%	8%	15%

Conclusion

This section has discussed factors affecting implementation of the reforms at both the bureaucratic and school levels. Reforms encountered resistance from the bureaucracy when they conflicted with long established patterns of behavior. Different strata of schools perceived the benefits of the reforms in different ways. These perceptions influenced their reaction to the reform process. We will return in later sections to these three types of schools, as we seek to understand the differential impact of the reforms.

Section IV: Restructuring Reforms

In commenting on the organization and administration of the school-ministry link, the *Education Proposals for Reform* (*EPR*) observed:

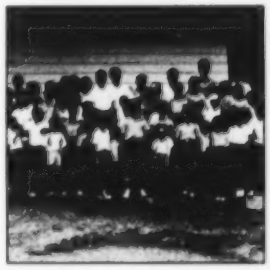
> Under a predominantly State system of education a more rational school system should be possible, whereby the limited resources available to the State are deployed to maintain equitable standards in the provision of education in all parts of the Island. What now obtains is a system which encourages the 9,500 schools at widely different levels in their educational standards to function as individual units competing for the limited resources of the State and the patronage of rich parents, thereby perpetuating a system which increases the resource imbalance between the few larger schools which continue to "enrich" themselves and the many small and poor schools which continue to be impoverished of human and material resources.

Sri Lanka's management reforms were enacted as a result of the collective realization that existing school-ministry linkages were unable to support the objectives of the *EPR*: more efficient use of existing resources, improved educational quality, and reduced disparities in educational standards. To this end, the *EPR* and subsequent reform documents proposed improving the communication within the school-ministry link.

This section explains the pre-reform organizational structure and discusses the impact of the restructuring reforms, focusing in particular on the Cluster and Division Office reforms.

• **The Pre-Reform Organizational Structure**. The structure prevailing at the time of the *RMR* had been established decades before. The key element in the system was that the Ministry of Education had control over all public financing and most curriculum, evaluation, and personnel decisions. Beneath the ministry was a number of regional offices whose function was to administer centrally made decisions. Those schools with senior secondary courses were directly supervised by the regional offices, while schools that provided only lower secondary and/or primary education were supervised by circuit offices. By 1981, a typical circuit office was staffed by one education officer (and clerical help), yet was responsible for supervising over 50 schools. This was an impossible load, so many of the schools were visited only once every two to three years (*RMR*).

...a typical circuit office was staffed by one education officer... yet was responsible for supervising over 50 schools.

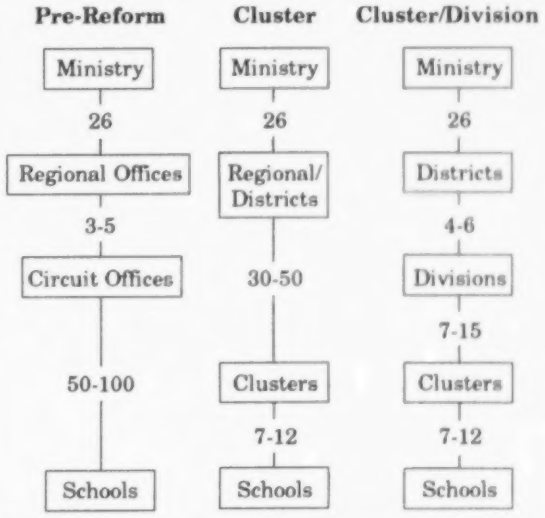


Classical organizational theory posits that the ideal span of control for most organizations is one supervisor for every six to ten subordinates. Where the span is wider, the supervisor experiences difficulty in communicating with all of the subordinates. Where the span is narrower, the supervisor may have too much time on his hands. Classical theory also suggests that the fewer the levels of organization the better (Blau and Scott, 1962).

It is clear that Sri Lanka's pre-reform approach placed impossible supervisory burdens on each level of the educational hierarchy. The basic elements of this pre-reform approach are summarized in Figure 5 below, along with two subsequent approaches. At most steps in the hierarchy the pre-reform approach had a span of control of 10 or more, and 50-100 between the school and the circuit office, 10 between circuit offices and the regional office, and 26 between regional offices and the central ministry. However, the pre-reform approach consisted of only four levels. The small number of levels, combined with the large

spans of control, resulted in poor communication. However, as it was generally understood that inter-level communication was difficult, officials often jumped levels to speak to someone further up the hierarchy, thus both expediting the decision they sought and placing further overload on the higher bureaucratic levels. It was partly to correct these pathologies that the *EPR* proposed another approach.

Figure 4: Sri Lankan Education Administrative Structure; Before and After Reform



Note: The numbers between levels of the system represent the number of units of the lower level that each higher level supervises. Thus, in the Pre-Reform structure, each regional office was responsible for supervising three to five circuit offices.

• **Clusters.** The *EPR* expressed concern about deficiencies of the pre-reform approach and strongly emphasized creating clusters of schools "for the purpose of better organization and management." The clusters were to be established in "defined geographical areas" (later called zones), and would "comprise a number of primary schools and several secondary schools." Some clusters might also include a school with Advanced Level grades. Altogether a cluster was expected to serve 3,000-5,000 pupils and to replace the school as the lowest level administrative entity:

> Pupil admissions, requisition of supplies, capital expenditure and allocation of teachers are to be on the basis that each cluster was one organizational unit. Thus the smallest unit for planning the development and organization of the school system will henceforth be the school cluster (*EPR*).

In each cluster, one school was designated the core school and its principal was to be the executive head of the cluster.

Sri Lankan educators learned of the cluster concept from nearby countries (Bray, 1987). However, in these systems the cluster was restricted to primary or secondary schools alone. This was not practical for Sri Lanka, given the wide prevalence of multi-level schools. Thus, by combining schools of different levels the Sri Lankan cluster marked a new departure. Usually, a large school with secondary grades was designated as the cluster core school, on the assumption that such schools were already the natural focus of local education. The *EPR* also proposed a school cluster board as an oversight agency and indicated that co-curricular and community activities might be reorganized at the cluster rather than the school level.

A small group of large, elite schools as well as certain small schools in isolated areas were excluded from the cluster reform, but the intent was to cluster 90% of all schools on the island. Recognizing that this reform might create difficulties, the *EPR* proposed an initial pilot stage consisting of 50 clusters that were "representative of a variety of conditions and situations." The pilot stage was carefully evaluated and several recommendations were made (Sararanayake, 1985). The report also observed that clusters were most appropriate for rural schools, while large multi-grade schools should be excluded from the reform.[6]

Most of these recommendations were incorporated into the *Report on Management Reforms*. Not mentioned in the evaluation study, but nevertheless authorized by the *RMR*, was the elimination of circuit offices in those areas where clusters were formed. Thus in organizational terms, the cluster approach resulted in a new structure composed of one central ministry, 26 regional offices, an average of 40 clusters per regional office, and 10 schools per cluster. These organizational elements are also summarized in Figure 4.

6. Specific recommendations included: careful planning exercises as a precondition for assigning schools to clusters; national and regional seminars to explain the advantages of clusters; changes in financial and administrative regulations to authorize cluster-level decision making with respect to teacher transfers and capital expenditures; special incentives for teachers reassigned within a cluster; and care in selecting cluster principals who possess critical professional and managerial skills (Sararanayake, 1985, pp. 65-9).

(The) modified division/cluster approach combines...the advantages of all the earlier approaches – specifically, greater access between and within units of each level.

As with the pre-reform structure, the Cluster reform preserved four administrative levels. It also significantly reduced the span of control between schools and the next level, the head of the cluster. However, the span between the cluster head and the director of the regional office increased to an average of 40 to 1. The main advantage of this approach was that it increased opportunities for cooperation and resource-sharing between schools. There were few positive implications for higher levels in the organization. Just as the cluster opened up possibilities for inter-school cooperation, it also invited conflict. Schools whose principals had close and beneficial links with local political leaders were reluctant to subordinate themselves to the cluster head and the potentially disadvantageous decisions of the cluster committee. Schools with abundant educational resources were sometimes reluctant to share these with poorer schools. Schools with Advanced Level classes sometimes resisted having these classes "rationalized" (i.e., discontinued, with the responsible teachers moving to another school so that more pupils could attend each class).

• **The Regional Office to District Office.** The *RMR* emphasized the need for regional offices to focus on local education. The regional offices were renamed district offices and placed under the responsibility of District Education Officers (who would have higher civil service status than the former Regional Education Officers).

• **The Circuit Office to Division Office.** The *RMR* also provided extensive comments on the inadequacies of the circuit offices and urged they be phased out. It outlined principles for a better mode of supervision, but did not detail an organizational solution. Instead, the principal writer, in his official capacity as Additional Secretary, initiated a pilot project to establish sub-district level division offices in four districts. Division offices were established between the district office and individual schools to provide the supervisory functions of the former circuit office plus a localized planning capability, personnel management, and certain technical services. To achieve these broader functions, division offices were staffed with three or more education officers, achieved through transfer of staff from district offices and circuit offices. Each division office was responsible for approximately 100 schools, twice as many as the circuit office. About five divisions were established in each district. The Division reform was originally a pilot project with no formal authorization; this ambiguous status had unfortunate consequences for division office personnel and technical functions, but little apparent effect on their supervisory function.

This innovation reduced the span of control between the district office and the division office to an acceptable level of five, but the division offices themselves were responsible for up to 100 schools apiece. While division offices were better staffed than circuit offices, this still posed a major challenge.

• **Division Plus Cluster.** Almost as soon as the Division reform was introduced, the Cluster reform was authorized for nationwide implementation. Thus, in many areas where the Division reform was piloted, the next level lower became clusters rather than schools. The effect was to add a level to the hierarchy and reduce the span of control at lower levels to ten or less. This modified division/cluster approach combines, in theory at least, the advantages of all the earlier approaches—specifically, greater access between and within units of each level. At no point excepting the link between the district offices and ministry does the ratio exceed ten. Thus this modified approach has the greatest promise for improving the efficiency of communication and resource-sharing within the educational system.

Analysis

Within four years, large numbers of schools were linked to the ministry through three of the restructuring reforms. The Division office reform had limited geographic coverage, and by 1987 when field work began, had largely been abandoned. Thus, we compare the pre-reform approach and the impact of three restructing reforms on administrative behavior.

- The **pre-reform approach**, with its wide spans of control at the lower levels frustrates inter-school cooperation as well as communication between schools and the next levels of the administrative system. On the other hand, because of the minimum number of levels, it invites concerned school leaders to take their concerns directly to the top for a special case appeal.
- The **Cluster reform**, with its narrow span of control at the lowest level encourages inter-school cooperation and resource-sharing but because of the number of clusters under a single district office, frustrates cluster-district communication.
- The **Division Office reform**, by adding a level below the district office, improves communication at intermediate levels. However, the

number of schools under each division office is so large that it frustrates smooth school-division communication and provides little chance for inter-school cooperation.

- The **Division/Cluster reform** tends to combine the strengths of the respective reforms. It improves district office communication with the next lower level. And because each division office is responsible for no more than 15 clusters, it also encourages division/cluster communication. Thus, communication at all intermediate levels is enhanced. Finally, the narrow span of control at the cluster level encourages inter-school cooperation and resource-sharing.

Measures were developed for the following features of administrative behavior:

- **Communication Downward to the School.** Principals were asked how many times a ministry official visited their school over the past year.
- **Communication Upward from the School.** Principals were asked how many times they communicated to a ministry official (higher than the cluster executive head) over the past year.
- **Lateral Communication.** Principals were asked how many times they had communicated with nearby principals.
- **Resource Sharing.** Principals were asked how many times over the past year their school had been able to use equipment, classrooms, teachers, or grounds of nearby schools.
- **Inservice Training.** Principals were asked whether, over the past year, teachers from their school had participated in inservice training seminars with teachers from nearby schools.

Table 7 compares predicted outcomes for the three organizational approaches to actual administrative behavior.

Restructuring of Relations Among Schools

One of the most compelling reasons for the management reforms was to enhance communication among schools and between schools and the supporting administrative structure.

Table 7. Expected Impact of Different School-Ministry Linkages on Administrative Outcomes

	School-Ministry Linkages		
	Pre-Reform	Cluster	Division/ Cluster
Expected Outcomes:			
Downward Communication	+	–	++
Upward Communication	+	–	++
Lateral Communication	–	++	++
Resource-Sharing	–	++	++
Cooperative Inservice Teacher Training	–	+	++

Key: – Low Impact; + Moderate Impact; ++ High Impact

For the analysis, the 272 schools in the sample were divided into six groups, as shown below. The management reforms were designed to benefit rural schools, that is, rural Type II and III schools.[7]

1) Rural pre-reform schools
2) Rural cluster schools
3) Rural division/cluster schools
4) Urban pre-reform schools
5) Urban cluster schools
6) Urban division/cluster schools

As indicated in the first row of Table 8, the incidence of lateral communication was higher for both cluster and division/cluster schools than among pre-reform schools in both rural and urban areas. Both cluster and division/cluster approaches established cluster-wide committees of principals and various teachers' groups as a way to improve communication. The strategy seems to have worked.

Table 8. School-Ministry Linkages and Communication (All Schools)

	Communication Flow:		
	Downward	Upward	Lateral
Linkage Group:			
Rural Pre-Reform	8.7	7.5	5.8
Rural Cluster	8.8	7.5	7.4
Rural Division/Cluster	11.2	12.0	9.8
Urban Pre-Reform	11.5	11.0	5.8
Urban Cluster	12.4	11.0	8.6
Urban Division/Cluster	13.6	14.2	10.5

Scale:
Downward: Mean of indicator that has a range from 0 to 20
Upward: Mean of indicator that has a range from 0 to 20
Lateral: Mean of indicator that has a range from 0 to 12

7. In addition, clusters were relatively few in urban areas, so our findings fall short in terms of statistical significance.

In that most new curricular ideas (including texts and teaching materials) as well as other educational resources are supplied by the Ministry of Education, it is also important for schools to have open lines of communication with higher level officials in the administrative system. The pre-reform circuit office was distant from most schools, whereas the division office, characteristic of the division/cluster approach, was closer and better staffed. For both these reasons, division/cluster schools would be expected to maintain better communication with the administrative system. As reported in Table 8, division/cluster schools manifested much higher levels than either pre-reform or conventional cluster schools on indicators of communication to and from higher levels in the administrative system. These differences were significant, both for rural and urban groups.

It is possible that cluster core schools, being the official window for cluster communication, might dominate external communication; if so, the average scores computed across schools might not reflect the communication level of the other cluster schools. To examine this possibility, the scores were re-computed without the core schools. As illustrated in Table 9, the pattern was virtually identical with that shown in Table 8. In other words, even the peripheral schools showed greater communication with each other and the administrative system than did pre-reform schools. This was particularly so in terms of communications between peripheral division/cluster schools and the administrative system. Thus the management reforms have a profound potential for reducing the isolation of Village Schools.

Provision of Resources From MOE

Schools with the division/cluster arrangement, by virtue of their superior communication with the administrative system, appeared to have an advantage in acquiring resources from the administrative structure. However, comparison of principals' reports about the timeliness of delivery of educational resources did not indicate a significant difference between groups. About an equal proportion of schools in each group said the MOE delivered resources such as teaching materials on time. While the division/cluster approach might lead to improvements in vertical communications, this was not converted into favoritism in supplying provisions. It might be that the MOE sought to treat all schools equally, regardless of reform status.

Table 9. School-Ministry Linkages and Communication (Core Schools Excluded)

	Communication Flow:		
	Downward	Upward	Lateral
Linkage Group:			
Rural Pre-Reform	8.6	7.4	5.6
Rural Cluster	8.6	7.3	7.1
Rural Division/Cluster	10.8	11.8	9.9
Urban Pre-Reform	11.3	11.4	6.1
Urban Cluster	13.5	11.5	9.0
Urban Division/Cluster	14.0	15.0	12.0

Clusters, Training, and Resource Sharing

A special concern of the Sri Lankan Cluster reform was to promote the sharing of resources between the more and the less advantaged schools. These resources can be grouped into human and material categories.

The main mechanisms for sharing human resources included inter-school teacher seminars, temporary assignment of teachers to cover for others on leave, and permanent transfer of teachers between cluster schools. Our research was only able to obtain information on the first of these mechanisms. According to the principals of Type II and Type III schools, teacher seminars were held an average of 3.8 times a year in rural pre-reform schools, 4.8 times in rural cluster schools, and 8.2 times in rural division/cluster schools. The pattern was less stable for urban schools, but reformed schools appear to have held more teacher seminars than did pre-reform schools.

In terms of material resources, principals were asked if their school borrowed or had been given any of the following resources from other schools in their area: teachers, visual aids, equipment, materials, stationery, or textbooks. An index was developed to reflect the volume and variety of resources each school reported.

Again, as can be seen in Table 10, rural schools in clusters received more resources than did pre-reform schools; schools in division/clusters were the largest beneficiaries. Urban schools that experienced organizational reform received more resources from neighboring schools than did urban pre-reform schools, though due to the small number of cases, the statistical relation was not significant.

Cost-Effectiveness

In some countries, for example in Thailand, the establishment of clusters has been associated with

Table 10. School-Ministry Linkages and Incidence of Resource Sharing, Cooperative In-service Teacher Seminars (Core Schools Excluded)

	Resource Sharing*	Teacher Seminars**
Linkage Group:		
Rural Pre-Reform	1.8	3.8
Rural Cluster	3.1	4.8
Rural Division/Cluster	3.8	8.2
Urban Pre-Reform	0.0	2.9
Urban Cluster	1.0	12.0
Urban Division/Cluster	1.0	3.0

* Measure of resource sharing; range from 1 to 13
** Mean number of inter-school teaching seminars in which school's teachers participate over a year

considerable added cost for new resources and buildings (Wheeler, et al., 1989). In Sri Lanka, the main additional allocation was the salary of an additional deputy principal at the core schools. The main objective of the Sri Lankan reform was to make better use of existing resources, especially underused resources at the core school. In sum, the management reforms embody simple structural rearrangements that have profound potential for promoting communication and resource sharing. The reforms are particularly attractive in view of their low cost, since they largely draw on existing resources. Thus, if the reforms promote any improvements they automatically become cost-effective.

Conclusion

The evidence presented thus far suggests that the Cluster reform and especially the Division/Cluster combination have considerable promise for improving school-ministry communication.

However, because the introduction of division offices and clusters may lead to the re-assignment and re-allocation of existing resources between schools, there may be resistance:

- At the **school level**, from those who feel they lose more than they gain. For example, a teacher may not wish to be reassigned to a new school in the cluster. A parent may not want to have her child walk to the location where all seventh grade education now takes place.
- At the **bureaucratic level**, from middle-level officials who are reassigned from urban offices to newly created offices in rural areas.

In some instances the reforms seem to have been realized only on paper and not in improved communication or resource sharing.

One way of illustrating this is by examining the different approaches with an index of system linkages. This index was created by summing the standardized scores for each of the measures of communication discussed earlier (upward, downward, and lateral). Schools above the median are considered to be strongly linked and those below are weakly linked to the ministry.

Table 11 presents the relation between the presence of management reforms and strength of school-ministry communication. Sixty-four of the schools where restructuring management reforms were implemented were still weakly linked.

Table 11. Presence of Management Reforms and Strength of School-Ministry Linkage

	Pre-Reform	Cluster	Division/Cluster
Weak	68	62	2
Strong	41	69	30
TOTAL # of Schools	109	131	32

Schools in the bottom middle and bottom right cells of Table 11 are those where we find a coincidence of organizational change and the type of administrative linkage behavior expected from these changes. Among the 131 schools that were included in the Cluster reform, 69 manifested strong linkages, whereas among the 32 schools included in the Division/Cluster reform, 30 manifested strong linkages. Clearly some clustered schools resisted the changes envisioned by the reform. A review of such schools indicates that many of these schools are in areas where local leaders have opposed the ministry's reforms. In other instances, a suitable person has not yet been appointed as the cluster head.

For future analysis of the impact of the reforms, it seems best to eliminate schools that refuse to cooperate with the overall objectives of the organizational reforms. Thus, in the sections below, when we speak of reformed school-ministry linkages, our focus will only be on schools which have experienced the reforms and now have strong school-minstry linkages.

Section V: Principals

Developing a new role for school principals is the cornerstone of the management reforms. No longer should the principal be "content to do routine administrative work" such as "attending to the admission of children" or providing "pay to the teachers at the end of the month." Rather the new principal should become a "first line manager" who will "design an effective technology for the educational process, organize a structure which functionally facilitates these tasks, and co-align these efforts to the challenges and needs of its environment (*RMR*)."

Decades of experience led Sri Lanka's leaders to recognize the pivotal role of principals in translating educational ideals into practice. While the system was rapidly expanding, however, little systematic attention was devoted to the selection and training of principals. Most principals rose from the ranks of teachers with no special training in school organization or management. Moreover, at the time of this study, some 30% of principals were in "acting" positions, awaiting approval by the ministry. Another 20% were "performing" principals, who taught full-time while carrying out administrative duties. Under such circumstances, there was little room for imagination or initiative.

The *RMR* specified a new set of functions for principals as the first line managers of schools: development of annual school plans, curriculum implementation, teacher supervision, staff evaluation, and communication with students, parents, and other members of the community. To realize these functions, principals were urged to develop a more participatory management style and to delegate certain responsibilities. Some structural modifications were also authorized; for example, very large schools were allowed an additional deputy principal to free the principal to concentrate on these new functions.

Two means were used to acquaint principals with their new role: (1) advice from supervisors at the district and division offices, and (2) new training courses. The management training school was moved to Maharagama where its staff was increased and its curriculum revamped. In addition, a shorter training course was developed for principals of smaller schools. District offices were supposed to conduct this program until all principals had received training.

Principals' management training...seems to have fostered the kinds of behavior envisioned by the reforms.

Indicators of Principals' Behavior

Despite numerous prescriptive studies concerning management and school leadership, there is a surprising scarcity of research on the actual activities of principals (see Hanson, 1985; Schwille et al., 1990; Gunawardena, 1986). Thus in considering indicators for principal behavior, this study developed its own approach. First, three broad categories of management behavior were specified:

1. Management Initiative, or the extent to which principals made decisions that could have been turned over to higher authorities.[8]

2. Management Practice, or the factors identified by the *Report on Management Reforms* as essential to an effective school program: goal-setting and planning, curriculum development, instructional leadership, pupil welfare, and school-community relations.

3. Management Style, or the factors stressed by the *RMR* as necessary to improving the working relations among school members and constituents:

8. Principals were given a list of ten decisions affecting schools and asked who, in their view, usually made each of these decisions. Principals technically had the authority to make several of these decisions on their own, though of course they also had the option of passing them up to higher levels for a final determination. Examples of the decisions include deciding on annual events, school excursions, finalizing time tables, and approving new teaching schemes, such as co-teaching or using new materials. Principals who stated that in 1987 more of these decisions were made at the school level were considered to show more initiative. As a means of judging if this indicator reflected the impact of the reform, principals were also asked who made the decision three years ago. For most decisions, principals indicated that they were more likely to make them at the school level in 1987 than they had been three years earlier.

One manifestation of commitment is the distance from the principal's residence to the school...

communication with staff, students, and outside officials, participatory decision making, and delegation of responsibility.[9]

Drawing on their experience as school officials, the research team developed indicators for each factor. Table 12 summarizes the types of behavior included in each indicator.

Table 12. Examples of Items Included in the Indicators of Management Practice and Style

PRACTICE

Goal-Definition and Planning
- Principal sets instructional goals
- Principal drafts a development plan
- Principal drafts an implementation plan

Curriculum Development
- School has a standing curriculum committee
- Principal participates in the committee
- In-school development of materials is encouraged
- Teachers of same grade level meet frequently to discuss their experience in implementing the curriculum

Instructional Management
- Principal visits classrooms at least once a day
- Principal often suggests ways of improving performance to students
- Principal spends a comparatively large amount of time in teacher supervision and talking with teachers

Student Welfare
- Principal gets in touch with parents if students fail to attend school
- Principal makes special arrangements for students who miss classes with a good reason
- Principal participates in the design of sports programs and club activities

School-Community Relations
- School engages in shramadana (voluntary labor) and community development, adult education, and community, cultural, and athletic events

STYLE

Participatory Decision Making
- Principal calls a general staff meeting
- Staff meeting occurs at least once every two weeks
- Principal encourages a free exchange of opinion at meetings

Delegation
- Staff member other than principal handles building maintenance, school records, student discipline, co-curriculum

Communication
- Principal frequently meets with education officials
- Principal frequently meets with parents

Influences on Principals' Behavior

Principal behavior varied extensively with respect to these indicators. A number of factors might have influenced these variations:

Hierarchy of Schools

The hierarchy of Established, Intermediate, and Village Schools, discussed earlier, might affect principals' behavior in important ways. For example, Established Schools are governed by powerful boards of directors, which have traditionally sought to protect their schools' autonomy. Thus, these schools' principals might be expected to show the most initiative. In contrast, principals of Intermediate Schools, given their desire to get ahead by cooperating with the bureaucracy, might show less initiative.

Size of School

School size is potentially important, especially with management style. In large schools, for example, delegation is a necessity, while participatory decision making may be difficult simply because of the numbers of teachers and community members involved.

School Location

The reform documents explicitly recognize that rural schools are more isolated and thus less familiar with the latest ideas in school management. On the other hand, their isolation may, by default, lead them to greater autonomy in decision making.

Characteristics of Principals

Principals' characteristics are also likely to affect management styles. Principals who have higher levels of education and/or have advanced further in the system are more likely to be familiar with new management concepts. Another consideration is principals' commitment. Some principals devote themselves wholeheartedly to their school's development, while others take the principalship less seriously, seeing it simply as a means of personal advancement. One manifestation of commitment is the distance from the principal's residence to the school; in general, the closer to the school, the more committed the principal.

9. Sources of data that include direct interviews with principals, a principals' questionnaire, and a leadership style survey.

Finally, of particular interest are the effects of the reforms on:

Principals' Management Training

The *RMR* authorized extensive reform and expansion of staff (management) training specifically to introduce the new managerial role.

Reorganization of the School-Ministry Linkage

In areas where this reorganization was effectively implemented, officials promoted school-based management through special seminars, the support of innovative school projects, and general encouragement.

Behavioral Determinants and Management Behavior

Table 13 presents statistical correlations between the factors identified above and managerial behavior. The reform-related variables, training and linkage, were consistently and positively associated with all preferred management practice and style variables, except initiative. Principals' management training, in particular, seems to have fostered the kinds of behavior envisioned by the reforms. Other factors were less clearly related to principals' behavior. Those factors that did affect management practice and style seem to have done so indirectly through the school-ministry linkage: for example, the Intermediate Schools that seek advancement through cooperation with the bureaucracy, schools with highly-educated principals or principals with high personnel rankings, and schools led by committed principals who live near the school. The main exception was school size, which was strongly correlated with delegation, but poorly associated with the rest: delegation is associated with large schools.[10]

• **Initiative.** In contrast to other principal behavior, initiative was negatively associated with the reforms. In other words, the reforms appear to have reduced rather than increased school-based autonomy. Principals who had received management training or whose schools were included in the Cluster and/or Division reforms showed less initiative than did other principals. In addition, the more formal education or the higher the level of public service the principal had acquired, the less initiative he showed. As expected, principals of Intermediate Schools also showed less initiative. The greatest autonomy, however, was in the isolated rural and Village Schools. Thus, the management reform and various related actions of the ministry appear to have hindered rather than fostered autonomy.

Table 13. Zero-order Correlations(r) of Various Factors and Management Behavior Indicators

	Indicators of Management Behavior:									
	Initiative	Mngt. Practice					Mngt. Style			Avg. Practice /Style
	I	G	C	IM	SW	SCR	P	D	CO	r
Factors										
Reforms:										
Linkage	-.08	.33	.18	.23	.28	.38	.29	.05	.57*	.29**
Training	-.28	.18	.20	.17	.30	.17	.19	.05	.30	.20
School Group:										
Established	-.02	-.03	.04	.09	.05	-.04	-.05	.29	-.15	-.01
Intermediate	-.13	.01	.21	.06	.07	.06	.19	-.08	.13	.07
Village	.21	.03	-.32	-.18	-.16	-.04	-.23	-.24	0	-.14
Context:										
School Size	.03	-.09	.10	.14	.19	0	.07	.28	-.20	.05
Rural	.14	-.02	.14	-.08	-.05	.03	-.10	-.24	-.13	-.08
Principals' Characteristics:										
Principal's Highest Degree	-.09	.06	.18	.07	.24	.15	.11	.21	.15	.12
Principal's Personnel Rank	-.22	.05	.08	.20	.12	.08	.02	.16	.11	.10
Proximity of Principal's Residence	.00	.21	.19	.14	.14	.04	.12	.16	.11	.12

* One of the items in both the factor and behavior variables overlaps.
** Because of the overlap for Linkage-Communication, that correlation was dropped in computing the average.

Key:
I = Initiative
G = Goal & Planning
C = Curriculum
IM = Instructional Management
SW = Student Welfare
SCR = School-Community Relations
P = Participation
D = Delegation
CO = Communication

10. These relations were subjected to more rigorous examination. For example, partial correlations between reform-related factors and management practice/style indicators were calculated so that the variance contributed by all other relations in the vertical column was partialed out. Each of the new partial correlations was statistically significant.

Principal Components of School Management

To further understand the relationships among principals' behaviors, we carried out further analyses using multi-dimensional scaling (Schiffman, et al., 1981)[11] which supported the following conclusions:

- Isolated schools, by default, show the most initiative.
- Principals who stress planning and instructional management are little more likely than principals who don't to develop innovative programs of pupil welfare and promote closer ties to the community.
- Principals who include staff in decision making are more likely to include community leaders and public officials as well. These principals are also the most likely to develop innovative student welfare programs and close community relations.
- Just because a principal includes others in making decisions does not guarantee that he will carry them out.
- Delegation is not related to including staff and outside officials in decision making. Rather, delegation seems to be primarily a function of school organization (easier to do in large schools), and principal's personal style.

To further validate these insights, the management indicators were examined using principal components analysis. This statistical technique, akin to factor analysis, helps to assess which management activities are associated with each other on the basis of actual principal behavior (as indicated by survey responses), and which activities are independent.

Two major components of Management Practice were identified:

(1) **Instruction-orientation.** The first component consisted of in-school activities that focused on a strong educational program, i.e., planning, curriculum development, instructional leadership.

(2) **Client-orientation.** The second component consisted of activities that promoted student welfare and strong school-community relations.[12]

The Management Style variables also resulted in two major components:

(1) **Inclusion.** Principals who included teachers in decision making were most active in seeking advice from public officials and the community.

(2) **Delegation.** Distinct from Inclusion was a principals' willingness to turn over the implementation of decisions to others.

Initiative, as an independent variable, was also included in this analysis. Table 14 presents the relationships between these components.

Table 14. Relationships Between the Five Components that Characterize Principals' Behavior

	Instruction	Client	Inclusion	Delegation
Instruction				
Client	.01			
Inclusion	.52	.34		
Delegation	.09	.10	-.02	
Initiative	-.24	-.12	-.16	-.08

As indicated earlier, initiative and delegation are largely independent of the other variables that characterize principals' behavior. Both client orientation and instruction orientation are related to inclusion, but independent of each other.

Conclusion

This analysis suggests a major challenge for officials seeking to transform the role of the Sri Lankan principal. While an attractive prescription for a new type of first line manager has been developed by high level ministry visionaries, several components of this prescription may not fit. Principals who tend to the internal aspects of their job tend to neglect the external aspects. Dynamic principals may be unable to make decisions on their own, due to bureaucratic intrusion.

The management reforms appear to have had a mixed impact on principal behavior. Principals reached by training programs and clusters and/or divisions are more likely to engage in goal-setting and planning, curriculum development, instructional leadership, strengthening student welfare policies, and fostering closer relations to their communities. Such principals are more likely to expand communication with community leaders and teachers and to include more parties in school decision making. However, the reforms seem to have backfired in terms of encouraging greater school autonomy. Indeed, schools that have transformed their internal style and practice are most likely to turn routine school-level decisions back to the bureaucracy for review and approval.

11. The analysis processed the correlation matrix through nine iterations realizing a Kruskal Stress Coefficient of .08.

12. In the principal components analysis for Practice, the first factor accounted for 45.5% of the variance and the second for 34.2%. In the principal components analysis for Style, the first factor accounted for 48.4% of the variance and the second for 31.9%.

Section VI: School-Community Relations

Policymakers encourage community involvement in schools for at least three reasons:

- **Additional resources** to generate financial and in-kind support for schools from the local community;
- **Parental involvement** to ensure that parents enroll their children and monitor their progress; and
- **School's place in community** to ensure that schools are sensitive to community needs, especially in terms of the curriculum.

Particularly in countries such as Sri Lanka, where resources are severely limited and national governments simply cannot afford to provide the universal education to which they are committed, the need to raise additional funds and other resources from the communities is obvious.

The Ministry of Education in Sri Lanka has long been concerned with promoting good relations between schools and their communities. This concern is manifested in statements, declarations, reports, directives, and white papers produced over the years by the MOE. Sri Lankan communities have shown a historical commitment to their schools. In return, schools have traditionally played an important role in community affairs.

Ministry Initiatives

Two MOE initiatives, designed to promote interactions between schools and communities, are noteworthy. The *Parents' Charter*, introduced in 1979, "embodies the rights and duties of parents in the education of their children" (*Parents' Charter*, 1979). Part I of the *Charter* spells out parents' rights to participate in educational planning and to have access to all the schools' information about their children. Part II lays down the parents' duties that are "important to make education most meaningful, balanced and complete." Parental duties include monetary support of the school, active participation in the School Development Society, provision of all materials necessary for study (such as books, pencils, clothing, health care, etc.) and involvement, where appropriate, in cultural, religious, and co-curricular activities.

Also in 1979, the MOE established School Development Societies (SDS) to take the place of Parent-Teacher Associations. These allowed community members and alumni, in addition to parents and teachers, to become involved in schools. The two major objectives of the SDSs were to develop schools that would meet the educational aspirations of the students, parents, and communities, and to help schools become active institutions in community development through social, cultural, and economic activities.

The extent of school-community activities in Sri Lanka is impressive.

Extent of School-Community Relations in Sri Lanka

School-Community Exchanges

School-community exchanges take three forms:

- **Monetary** contributions
- **Shramadana** or other voluntary labor
- **In-kind contributions**, including wood for furniture or building construction; tea and food for festivities; books, maps, globes, or other teaching supplies; etc.

The extent of school-community activities in Sri Lanka is impressive.[13] In this survey, 62% of the principals report that their annual implementation plans stress greater school involvement in the com-

13. Data for this section were derived from the Principal's Survey and Questionnaire as well as a series of 21 in-depth case studies carried out by the National Institute of Education in Sri Lanka. To obtain school-community exchanges figures, principals were asked to estimate the value of school-to-community and community-to-school contributions in terms of three categories of exchanges: monetary, voluntary labor (*shramadana*), and in-kind donations. Unless otherwise noted, figures represent totals of these three types of contributions. All figures are in Rs per child; total contributions divided by school enrollment in 1985. Principals were also asked questions about school-community activities undertaken in the past year. Quotations are from the case studies.

munity. Fifty-eight percent of all schools provide some form of support to their communities, while 69% of the communities make contributions to their schools. Such support takes a variety of forms. Schools help their communities by performing shramadana (voluntary labor) to build roads (29%) and places of worship (29%). Schools organize or assist with religious, cultural, or recreational events (23%). Ten percent of schools provide personnel and/or facilities to educate early school-leavers. Communities support schools by helping organize school functions and festivities (56%), providing monetary support (51%), building and improving school facilities (42%), etc.

When the value of school-to-community contributions is compared to school budgets, the average total value of exchanges is 4% of the school's budget.[14] In return, schools receive value equal to 6% of their budgets in the form of community-to-school contributions. In most cases, schools receive greater value than they give. Thus, communities represent important resources for many schools, at no cost to the government.

It should be noted, however, that School-Community Relations (SCR) are not completely represented by community-school contributions. Repeatedly, while gathering data for this report, both principals and communities stressed that the support between schools and their communities extends beyond exchanges of material resources and organized activities.

One community member reports:

> Here the people are poor, and the funds are poor too. But people show their good will in other ways, by labor, by their high respect for the principal and teachers and their feeling of intimacy towards the school.

Another says:

> The principal says that he is satisfied with the level of SCR in this community. It is true that he has done better work in other developed communities, but in terms of poor social and economic levels of the settlement, the people here respond well. The principal says that if parents have faith in the school, and especially in the principal, good SCR is possible. The level of SCR should not be measured by material transactions alone. Enthusiasm and cordial relations are more important.

A principal points out, "the poorer the community, the greater the need for school-community linkage."

Community as Learning Resource

One area in which communities serve their schools, reported extensively in the case studies that were part of this study, is curriculum. Many schools use the surrounding community for teaching various subjects in the official curriculum. For example, teachers take students to visit ancient monuments and ruins as part of history classes. Geography classes often go out into the countryside to add practical experience to classroom instruction. Social studies classes sometimes conduct surveys of the communities; home economics classes may teach home-based activities relevant to local conditions.

Finally, the atmosphere fostered by close school-community relations presumably helps schools achieve their instructional goals.

What Factors Make a Difference?

In Sri Lanka, there are substantial, systematic differences across schools in the amount of support schools and communities provide each other.

Referent Communities

School-community relations is an umbrella term that actually refers to two different types of "community." One type consists of the people living in the vicinity of the school. Most typical of isolated, rural villages, school and community are often quite closely identified. In many cases, the community has built the school facility and looks to the school for cultural leadership and to satisfy the aspirations of parents and children. The school, in turn, depends on the goodwill and support of the community to carry out its instructional program. In such cases, the personality and characteristics of the principal are crucial to how well the school can function. A second type of community is more typical of the Established Schools. The primary referent "community" for such schools is the alumni association. Graduates of elite schools assume important managerial positions in

14. School budget figures are taken from the 1985 School Census. To obtain these figures, average contributions by school group were divided by average school budgets by school group.

...Village Schools, though the poorest and most isolated, contribute larger absolute and percentage amounts to their communities than do Established or Intermediate Schools.

Sri Lankan society and help maintain high levels of support for their schools.

The importance of such referent communities is reflected in differences in levels of school-community support across the groupings of schools discussed earlier. Established Schools enjoy high levels of support from the Old Boy and Old Girl networks that typify their "communities," while Village Schools receive substantial assistance from people living near the school. Intermediate Schools, lacking clear referent communities, report lower levels of school-community support. Data are shown in Table 15.

Table 15. Average Value of Exchanges between School and Community by School Type (Rs per child)

	School Group: Established Schools	Intermediate Schools	Village Schools
School→Community (in Rs)	55	22	67
as % of Unit Expenditure	6%	3%	7%
Community→School	113	40	86
as % of Unit Expenditure	13%	5%	8%
Receive to Give Ratio	2.1	1.8	1.3
Total Exchanges School & Community	168	62	153

High levels of school-community commitment are demonstrated by the fact that Village Schools, though the poorest and most isolated, contribute larger absolute and percentage amounts to their communities than do Established or Intermediate Schools. In turn, they receive twice the average level of contributions from communities as do Intermediate Schools.

School Support for Communities

A second major factor affecting the level of community support is the degree to which a school supports the community. Table 16 provides correlations between school support for communities and community support for schools for the three groupings of schools.

School-to-community contributions are the single highest correlate of community-to-school contributions among Established and Intermediate Schools. The correlation is weaker among Village Schools, where other factors, noted below, assume greater importance.

Table 16. Zero-Order Correlations (r) between Average School→Community and Community→School Contributions

School Grouping	R
Established Schools	.41
Intermediate Schools	.44
Village Schools	.21
Overall Sample	.30

School Context/Characteristics, and Principals' Characteristics

A number of other factors are related to community support of schools. Again, the extent to which a factor is correlated with community-to-school contributions varies by school group. In some cases, the direction of the association varies as well.

As indicated in Table 17, contextual factors play a key role in community support of schools. In general, the larger the school, the more support it receives from the community. Among Established and Village Schools, richer communities provide more support. Among Intermediate Schools, however, higher socio-economic status is negatively correlated with increased community support; poorer communities provide schools with more support than do richer communities. Similarly, for all three groups, rural schools provide somewhat more support than do urban schools. Contextual factors are most important among Village Schools, then Intermediate Schools; community support of Established Schools is least dependent on where the school is.

Table 17. Zero-Order Correlations between School Context/Characteristics and Community-to-School Contributions

	School Group: Established Schools	Intermediate Schools	Village Schools
School Context/Characteristics:			
Greater School Size	-.03	-.02	.43
Higher Community SES	.14	-.12	.26
More Rural	.07	.06	.07
Principals' Characteristics:			
More-educated Principal	.06	.02	.38
Higher Career Status	.08	-.08	.27
Distance from Principal's Residence	-.04	.01	.26

Among Village Schools the school principals' characteristics play a greater role in relation to community support than among Intermediate and Established Schools. The degree of respect that a principal is able to command is key to school-community relations among Village Schools. The better educated a principal is, and the higher his or her career status, the greater the community support. Factors affecting community support are complex, however. There is a counter-intuitive positive correlation between distance from the principal's residence and community support. Principals who live too close to the school receive less community support because they are more likely to get embroiled in local politics. One principal comments:

> There are political influences and a principal can make use of these influences as an advantage in performing his duties. But one has to be very careful in working with the community. A principal has to be completely unbiased in a community with people holding widely different political ideas.

In the looser Intermediate School communities, the principal's residence matters less. Again, virtually all factors affect Village Schools the most. And the most important contextual variables affecting community support of Village Schools relate to the location of the school and the status of the principal.

System Interventions – Clusters and Divisions

The reorganization of the system in terms of clusters and clusters/divisions might theoretically affect school-community relations in different ways: Clustering might serve to draw schools away from their communities, orienting schools instead toward other schools in their cluster. Community members might provide less support, reasoning that any resources they donate will be shared by other schools within the cluster. Indeed, this was a major concern among community members in the case studies. A researcher reported on a conversation with one principal:

> The decentralization of school management into zones and clusters is an important change that may help develop the schools, previously set back for lack of resources and other reasons. The resources of the cluster can be utilized among the cluster schools.

Such exchanges or transfer of resources could be a problem with schools that obtain most of their resources from the community. In such cases, the community would not agree to the transfer or exchange of such resources.

Conversely, clusters and divisions might have an opposite effect on community support. By paying attention to schools, particularly the most isolated ones, the ministry's reorganization may enhance the prestige of a school and convince community supporters that the school will improve. In this way, community members might provide more, rather than less, support.

This contradictory effect is borne out by the data shown in Table 18. Both clusters and divisions are associated with substantially greater community support of schools. In addition, clustered schools report somewhat greater support from communities than do pre-reform schools. However, the addition of closer ties with the ministry through Divisions reduces school-to-community contributions to pre-reform levels. The Division reform apparently draws schools' attention away from communities, while increasing communities' interest in schools. Overall, the reforms promote, rather than retard, school-community relations, as measured by school and community exchanges. The long-range net effects, however, are difficult to assess.

Table 18. Average School→Community and Community→School Contributions, by Reform Status and Strength of School-Ministry Linkage (Rs. per Child)

	S→C	C→S	Total S→C→S	Receive to Give Ratio
Reforms:				
Pre-Reform	21	28	48	1.3
Cluster				
Weak Linkage	38	44	82	1.2
Strong Linkage	47	65	112	1.4
Cluster/Division				
Weak Linkage	4	24	29	5.8
Strong Linkage	21	131	152	6.3

School Leadership and Community Support of Schools

In relation to other management initiatives, community support is associated with reforms that

appear to improve a school's status and make visible the school's improvement efforts. Other reforms have less effect on community support. If community support of schools depends in part on visible signs of school improvement effort, then schools with principals demonstrating greater leadership and implementing school projects should enjoy greater community support.

• **Projects.** Focusing on schools' internal practices, in 1984 the ministry distributed a letter inviting all schools to attempt one or more self-improvement projects. The ministry's letter identified seven broad areas where self-improvement might be attempted.

Table 19. Mean Proportion of Projects Implemented by Schools in the Respective School-Ministry Linkage Groups (Core Schools Excluded)

	Rural			Urban	
	Pre-Reform	Cluster	Cluster/Division	Pre-Reform	Cluster
Projects:					
Students (9)	16%	16%	28%	21%	56%
Teachers (8)	11%	13%	15%	21%	56%
Materials (2)	10%	3%	19%	21%	25%
Buildings (3)	18%	11%	28%	21%	83%
Co-curriculum (4)	13%	9%	15%	16%	63%
Guidance (2)	4%	2%	7%	10%	50%
Community (2)	21%	22%	18%	10%	50%

Note: Figures in parentheses represent the total number of projects suggested by the Ministry for each project category. No figures are provided for Urban Cluster/Division schools because of insufficient data.

In spite of vague instructions from the ministry, principals of Cluster/Division reformed schools attempted more school projects than did pre-reform or cluster reform schools.

• **Principals' Behavior.** As discussed earlier, management behavior consists of five distinct components related to: instruction, client-orientation, inclusion, delegation, and initiative. School-community relations would seem to be most sensitive to client-oriented projects–those explicitly targeted at improving student welfare. Projects aimed at improving the inclusiveness of school planning activities would affect school-community relations to the extent that parents and community members are actually included, want to be included, and have previously been excluded. Instruction-oriented projects would improve school-community relations if parents can see children making greater progress in their studies. Projects aimed at improving delegation and initiative should have little effect on school-community relations, except as they indicate to parents in visible ways that the principal is working to improve the school.

Table 20 provides correlations between community-to-school contributions, the components of preferred management practices, and the school-ministry linkage variables discussed earlier.

Table 20. Zero-Order Correlations between Preferred Management Practices and Community-to-School Support by School Group and Management Component

	School Group:			
	Established Schools	Intermediate Schools	Village Schools	Mean
Management Component:				
Inclusion	.13	.12	.41	.22
Delegation	-.19	-.07	.38	.21
Client	.21	.03	.16	.13
Initiative	-.00	-.07	-.23	.10
Instruction	.18	.07	-.03	.09

As hypothesized, use of preferred management practices is generally associated with increased community support. Again, the nature and extent of effects vary by school group, and the impact is greatest on Village Schools. Inclusion of teachers, community members, and public officials in decision making is the single most important factor associated with community support in Village and Intermediate Schools. Among Established and Village Schools, with their clearly-defined communities, client-oriented practices were important. Practices aimed at improving instruction are important among Established Schools but largely irrelevant or negative among Village Schools, a possible reflection of the relative sophistication of Established School community members about instructional practice. It may also be that a focus on instruction orients schools toward internal practice and away from engagement with the community. The negative impact of initiative, particularly among Village Schools, may reflect schools' isolation from MOE support. It is unclear why delegation should play an important role among Village Schools. But it is important to note that the

components of management practices most closely associated with community support–inclusion, delegation, and client-orientation–are visible.

The impact of management practice is greatest among Village Schools, then Established Schools, and least among Intermediate Schools. This impact is reflected in Table 21.

Table 21. Impact of Management Reforms on Average Community-to-School Contributions

	Degree of Implementation: Low	High	Impact	Net Change (Rs/child)
Management Reforms by School Group:				
Established Schools				
Positive Impact:				
Instruction	86	130	1.5	45
Client	96	132	1.4	36
Initiative	114	140	1.2	26
Inclusion	107	119	1.1	12
Negative Impact:				
Delegation	139	91	0.7	-48
Intermediate Schools				
Positive Impact:				
Inclusion	11	58	5.1	47
Instruction	23	53	2.3	30
Client	33	48	1.5	16
Initiative	39	44	1.1	5
Negative Impact:				
Delegation	41	39	1.0	-2
Village Schools				
Positive Impact:				
Client	23	287	12.4	264
Delegation	27	289	10.6	262
Inclusion	6	192	32.2	186
Instruction	103	127	1.2	24
Negative Impact:				
Initiative	151	26	0.2	-125

Groups of Variables Affecting School-Community Relations

To assess the relative impact of different types of factors affecting school-community relations, we calculated mean correlations for five groups of variables with community-to-school contributions:

- School-Ministry Linkage Reforms (Clusters and Divisions);
- School Context/Characteristics (Community Socio-economic Status, School Size, and Location);
- Principals' Management Practices (Instruction, Client, Inclusion, Delegation, Initiative);
- Principals' Characteristics (School Distance from Residence, Education, Career Status); and
- School-to-Community Contributions.

Table 22 summarizes these figures for schools in the three groups. For much of the system, the most important factors relating to community support of schools are subject to control by principals and/or the ministry. Overall, school-to-community contributions, followed by linking reforms and management practice, have the greatest impact on community support of schools. Less easily manipulable variables such as principals' characteristics and school context have less impact. It would appear that much can be done to improve school-community relations in Sri Lanka.

Table 22. Mean Correlation Coefficients for Groups of Variables Affecting Community-to-School Contributions by School Group

	School Group: Established Schools	Intermediate Schools	Village Schools	Mean
System Interventions:				
Linking Reforms	0.16	0.11	0.34	0.20
At Principal's Discretion:				
S→C Contributions	0.41	0.44	0.21	0.35
Projects	0.17	0.12	0.22	0.17
Fixed/Relatively Fixed:				
Principals' Characteristics	0.08	0.07	0.20	0.12
School Context	0.05	0.06	0.23	0.11
Overall Mean	0.14	0.10	0.25	0.16

Conclusion

The story of school-community relations in Sri Lanka is encouraging. Given a history of close ties between schools and communities, communities are willing to provide quite substantial amounts of monetary or voluntary support for schools. The degree of community support depends on five primary factors:

- A clearly-defined community to which the school can relate;
- School support of the community;
- Strong leadership on the part of the principal;
- Community respect for the principal;
- Visible efforts on the part of the school to improve; and
- Ministry interest and action on behalf of the school.

Section VII: Management Reforms and Pupils

The focus of this report up to this point has been on the types of changes that received the most emphasis in the reform documents: the reorganization of the school-ministry linkage, the transformation of the principal's role, and the strengthening of school-community relations. As we stated in the introduction of this paper, the concern to improve the quality of education for the benefit of children was a dominating theme throughout the reform documents. The *Report on Management Reforms* stresses that, "the accountability of school educators should be mainly to their pupils and parents." (*RMR*). And yet, the reform documents do not lay out a general or systematic plan for evaluating the effect of reforms on pupil behavior. As explained in the Appendix, the task of understanding this relationship was extremely challenging. In spite of the difficulties, we think that these imperfect measures do provide an objective basis for gauging the impact of reforms on pupil behavior.

Measuring Pupil Behavior

To assess the impact of the management reforms on pupil behavior, we used three general concepts, with specific indicators of each:

- **Internal School Efficiency**, or the degree to which a school retains pupils, measured by the repetition rate.
- **Access to More Schooling**, or the proportion of pupils who continue schooling. Two measures were used:
  - the proportion of eligible students who take the grade five scholarship examination; and
  - the proportion of grade five students promoted to grade six.
- **School Quality**, or the extent to which a school's students do well, measured by:
  - a school's average score on the grade five scholarship examination; and
  - the proportion of a school's students that pass the O/Level examination.

The Gap Between the Best and the Rest

As shown in Table 23, different types of schools perform very differently in terms of pupil outcomes. Established Schools have one-third the repetition rate of Village Schools. The average score of pupils in Established Schools who take the grade five scholarship exam is nearly twice that of pupils in Village Schools. This divergence is all the more striking given the proportions of pupils who sit for the examination: three out of five children in Established Schools as compared with one out of five in Village Schools. Large gaps are also evident in the proportions of pupils who move on to secondary education and the proportions who pass the mid-secondary O/L examinations. On most of these measures, pupils from Intermediate Schools perform better than students of Village School students, and less well than students from Established Schools.

The schools are...so different...that they have to be considered as qualitatively distinct entities.

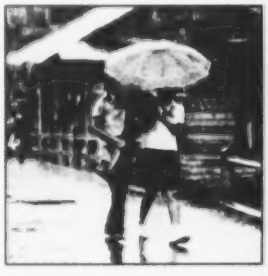


Table 23. Variations in Pupil Behavior by School Group

	Indicators of Pupil Behavior:				
	Repetition Rate	Average Score Grade 5 Exam	Proportion Taking Grade 5 Exam	Promotion Rate to Grade 6	O/Level Pass Rate
School Group:					
Established	5.0%	74.3	62.1%	94.3%	56.9%
Intermediate	9.6%	46.3	35.3%	91.4%	28.7%
Village	13.7%	46.4	19.7%	73.9%	7.4%
Overall	9.8%	55.8	37.6%	88.9%	36.7%

In sum, Table 23 clearly indicates that the wide gaps in school resources are translated into very substantial disparities in pupil behavior. The schools of the respective strata are so different in their links with society, the extent to which they were touched by the reforms, the resources they command, and the achievements of their pupils that they have to be considered as qualitatively distinct entities. Thus, in assessing the impact of the reforms, differences must be considered by strata of the school hierarchy.

Reform Components Associated with Student Outcomes

While the overall reform program was highly complex, the analysis reduced the focus to nine distinctive components, of which this assessment has developed empirical indicators for eight components (discussed earlier). Table 24 presents zero-order correlations between these eight reform components and the five indicators of pupil behavior. Four of the reform components have a consistent association with indicators of desired pupil behavior: instruction, inclusion, style, and delegation, while the remainder have less consistent or negligible correlations.

Table 24. Zero-Order Correlation of Reform Components and Pupil Behavior

	Indicators of Pupil Behavior:				
	Repetition Rate	Average Score Grade 5 Exam	Proportion Taking Grade 5 Exam	Promotion Rate to Grade 6	O/Level Pass Rate
Linkage	-.02	-.10	.03	.09	-.03
Training	-.16	-.05	.15	.20	.03
Initiative	.13	.15	-.26	-.08	.02
Instruction	-.06	.18	.12	.22	.11
Child-Parent Outreach	.11	-.07	.14	.19	-.09
Delegation	-.19	.11	.23	.28	.10
Inclusion	-.01	-.03	.11	.33	-.03
School to Community	-.09	-.06	.09	. 0	-.05

Why are several of the reform components weakly related to student behavior? The components of improved school-ministry linkages and training can be thought of as bridge components which were introduced to change how schools are managed; no one expected these components to have a direct bearing on pupil behavior. Thus their weak association with the outcome indicators is not disturbing.

The remaining components were all expected to have a positive impact on pupil behavior. But as was pointed out in the discussion of the principal's role, some of these components did not evolve as expected during the reform process. Principals who stressed instructional leadership, for example, tended to downplay the importance of strong relations with pupils and parents. However, as will become evident below, time spent on instructional leadership proved to be positively correlated with pupil behavior. Still, principals who stressed this component may have had less time to spend on the presumably complementary function of creating strong links with parents and children.

Initiative is a special case, so it is given separate consideration below.

Reform Connections Among Intermediate Schools

The management reforms had the greatest impact on pupil behavior in Intermediate Schools. Schools of this strata tend to be the most likely to look to the official bureaucracy for new resources, and hence, have been the most compliant in introducing the management reforms. As a result, the reforms appear to have had a greater impact on pupil behavior in Intermediate Schools than the other schools. Table 25 presents by strata the correlations of instructional leadership, inclusion, and delegation with the five indicators of pupil behavior. All correlations between instructional leadership and outcomes are significant and in the expected directions for Intermediate Schools. However, the pattern is inconsistent for Established and Village Schools. Essentially the same pattern is found for the relations between outcomes and inclusion practices.

Delegation, however, is the most efficacious for Established Schools. This is almost certainly related to the fact that Sri Lanka's largest schools, where delegation is most beneficial, are in the Established group. The average Established School employs 22 teachers as compared with eight for Intermediate Schools and three for the Village group. Delegation is not meaningful in smaller schools.

Table 25. Zero-Order Correlations of Principals' Practice-Style Components with Pupil Behavior by School Group

	Indicators of Pupil Behavior: Repetition Rate	Average Score Grade 5 Exam	Proportion Taking Grade 5 Exam	Promotion Rate to Grade 6	O/Level Pass Rate
"Instructional" Management Correlations within:					
Established	.32	.08	-.09	-.03	.05
Intermediate	-.11	.24	.19	.19	.10
Village	.00	.27	-.03	.45	nd
"Inclusion" Correlations within:					
Established	.22	.03	-.07	-.53	-.06
Intermediate	-.08	.23	.19	-.02	.16
Village	-.04	-.47	.42	.51	nd
"Delegation" Correlations within:					
Established	-.50	.22	.21	.53	.05
Intermediate	-.07	-.07	.07	.01	-.05
Village	-.13	-.37	.08	.54	nd

Table 26. Zero-Order Correlations of Initiative with the Pupil Behavior Indicators by School Group

	Indicators of Pupil Behavior: Repetition Rate	Average Score Grade 5 Exam	Proportion Taking Grade 5 Exam	Promotion Rate to Grade 6	O/Level Pass Rate
School Group:					
Established	-.49	.28	.28	-.11	.01
Intermediate	-.02	.10	-.23	.08	-.01
Village	.43	.17	-.10	.21	nd

Advantages and Pitfalls of School-Based Decision Making

While the ministry's reformers rhetorically favored greater autonomy for schools, in fact the reforms tended to erode possibilities for school-based decision making. As observed above, the more closely a school was affected by the reform process, the less likely it was to show initiative. But the reform process was not uniform in its impact on all schools. The bureaucracy tended to achieve the greatest penetration in the decision making of Established Schools, despite their resistance. Village Schools, on the other hand, experienced the least penetration. Village Schools probably enjoyed the most autonomy simply because they are located in more remote areas, where officials are less likely to visit on a regular basis.

But is this pattern of school-based management by default best for the pupils? The pattern of relations in Table 26 suggests that it is not. Among Established Schools, greater autonomy in school decision making is associated with desirable outcomes: low repetition, a high mean on the grade five scholarship exam, and large proportions of pupils taking the exam. Among Village Schools, however, autonomy is associated with undesirable outcomes: high repetition, a low proportion of pupils taking the grade five scholarship exam, and a low proportion of pupils advancing to secondary education.

Thus one of the greatest failures of the reform process may have been the reluctance to increase autonomy among the better schools, coupled with an inability to reach out in a significant way to the weakest schools. This pattern suggests that the weaker schools could benefit significantly through closer links to the resources and supervisory skills of the ministry. The Cluster and Division reforms provide a means to reach out, but at the time of this study, their potential is insufficiently realized.

Conclusion

Pupil behavior appears to have improved where the reforms have been introduced in the schools. Not all of the reform components contribute directly, and some not even indirectly. Perhaps the most powerful management practice is the principal's systematic emphasis on instructional leadership: developing an annual plan, integrating staff in curriculum development, and helping teachers improve instructional techniques. The reforms have helped principals to improve their instructional leadership and thus have benefited pupils.

Section VIII: Implications

The Ministry of Education in Sri Lanka has launched bold management reforms that combine both decentralizing and centralizing components. Among these reforms, Zones and Clusters/Divisions are likely to be widely applicable to other national systems. The Sri Lankan achievements are all the more remarkable, given that they occurred during a civil war.

To achieve reforms of the complexity being discussed in this report, it seems essential to recognize the importance of human contacts and trust.

- **The "center" is, in reality, many centers that may formulate policies independent of each other.**

It is common, but is it useful, to speak of Third World educational systems as centralized? While the several reforms we have considered were all centrally derived, some were proposed in Parliament and became laws, others were the outcome of national commissions, while yet others were proposed by senior officials in different bureaus of the Ministry of Education. The original conception of these various reforms was diverse, and their actual implementation was, at best, poorly coordinated. It is difficult to pinpoint a single center in the Sri Lankan educational polity.

- **Reforms that require joint action are more likely to encounter difficulties.**

The Zones reform was the most "successful" in the sense that it was implemented on a national scale; this was possible because it could be executed out of a single central planning office. Other reforms could not, and this often led to complications. The clearest example of this was the Division Office reform, which, in its original conception, was to have responsibility for teachers' salaries. The Ministry of Finance, which is in charge of authorizing the establishment of new government accounts, however, flatly refused to authorize division office accounts.

- **Reform implementation may be thwarted by a personnel policy that encourages the frequent rotation of key personnel.**

The Additional Secretary was responsible for several reforms, and two were his personal projects which had no authorization besides his recommendation, and which languished when he took an overseas assignment. More generally, the senior educational service in Sri Lanka reassigns officers every two or so years. In several districts, dynamic regional directors who had pushed reforms were followed by less committed directors, resulting in a serious loss of momentum. To achieve reforms of the complexity being discussed in this report, it seems essential to recognize the importance of human contacts and trust. Thus personnel policies should strive for consistency in leadership positions over a several year period, rather than assuming that officers are interchangeable parts in a mechanical bureaucracy.

- **Reforms should be thought of as a creative process to be continually monitored and reshaped.**

One view of reform posits that a "grand design" with a multi-year implementation plan is successful when the plan is precisely followed. The Sri Lankan experience indicates that some of the best innovations were not included in the original design, but instead seemed to emerge almost by accident through a modification and merging of original components. In the early stages of the reforms, Clusters and Divisions were tried out in geographically distinct areas. Several years after these two reforms were initiated separately, regional officials decided to experiment by combining them into what became the Cluster/Division reform. The experiment worked, and be-

...some of the best innovations were not included in the original design, but instead seemed to emerge almost by accident through a modification and merging of original components.

came the basis for a reformulation that was widely promoted.

• **It may be difficult for principals to accomplish all of the changes in the reform.**

A key theme in the reforms was for the principal to become a first line manager and show considerable initiative in carrying out his or her duties. Our research shows that principals generally had difficulty in making all of the changes. They could make improvements in some areas, but often at the expense of improvements in others. The findings raised more questions than answers; it is apparent that we need to develop a deeper understanding of the principal's role, particularly if we seek its reform.

• **A bureaucracy's potential for assisting schools may be in inverse relation to the schools' need for that assistance.**

One of the most intriguing findings of this study was the proclivity of bureaucratic officers to spend the majority of their time serving the requests of the best schools in the system and paying "supervisory" visits to these schools, when it was the isolated Village Schools that could (and according to our research did) benefit most from their attention. It is understandable that the officials might prefer to visit more attractive schools, especially as these schools are closer to their offices and the principals there are likely to be better educated and more at ease. Officials have less incentive to go to schools where they may hear complaints or be asked tough questions. It seems that incentives might be restructured to shift the focus of bureaucratic attention. The division office, located in rural areas, is one way to bring bureaucratic assistance to isolated Village Schools.

• **Different contexts may require different reforms.**

One of the clearest lessons of the Sri Lankan management reforms is that both its outreach and its impact varied by type of school. It might be said that the reforms were most forcefully introduced in the Established Schools, which ironically were least in need of the proposed changes. The reforms seemed to make the greatest difference among Intermediate Schools, while they were in some ways ill-suited for the Village Schools.

• **It is important to appreciate the diversity of communities associated with schools.**

Much of the current rhetoric about communities fails to make useful distinctions that fit the situation of schools. Some of the schools in this study recruited students from nearby neighborhoods, while others recruited from a wider area. Some recruited largely from poor homes, other from relatively affluent homes. Some had ethnically diverse student bodies; others were more homogenous. The relations of schools to their community were clearly conditioned by the nature of their community.

• **Schools have considerable potential for stimulating community involvement.**

While the nature of the community affected the quality of school-community relations, this study shows that any school that implements an active program to stimulate community involvement will be rewarded. The rewards can range from voluntary labor to improved school grounds or enhanced pupil study habits, to financial resources and subsidies for school athletic and cultural events. Community involvement also results in substantial improvements in learning.

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Appendix: Research Design and Sample

In 1986 a group of U.S. educators under the auspices of Harvard University's Project BRIDGES were invited to collaborate with the National Institute of Education to research the quality and efficiency of Sri Lankan education. Because of the number of reforms involved, a workshop was held in Sri Lanka in October 1986 to define areas for research and prepare a research design.

Four Research Problems

The workshop identified four broad problems for research:

(1) **Management reforms affecting the sub-regional level**, particularly the establishment of division offices and the formation of school zones and clusters. Have these sub-regional changes improved vertical communication, inter-school communication and resource sharing? Cluster reforms have been introduced in a number of developing countries. Unique to the Sri Lankan example was the addition, after initial frustration with the standard Cluster reform, of the division offices. Do the division offices add an extra dimension to the performance of clusters?

(2) **Management reforms (and the associated training) for enhancing the principal's role as first line manager**, with primary concern for instructional practice. A key assumption in the reforms is that relatively brief training courses will motivate principals to assume new attitudes and patterns of management practice. Is the training sufficient? Does the training need to be reinforced by other changes in the educational infrastructure such as the institution of clusters? Does the impact of training depend on the personal characteristics of principals? Does the training play a significant role in principals' responses to the reforms, or are there other factors that motivate the intended role changes?

(3) **Management reforms to improve the quality of classroom management.** The effect of improvements in communications, resources, and management practices promoting instruction should be improved classroom management, and hence increases in student motivation and learning. Have the classrooms changed? Are there improvements in school outputs? (Area not covered in this report–refer to Navarro, 1988; Montero-Sieburth, 1989).

(4) **The management reform requiring all schools to establish School Development Societies as a first step towards strengthening ties with the schools' communities.** What kinds of schools are most likely to develop active community-oriented programs? What types of communities are most likely to respond to these initiatives? Are community and school characteristics sufficient to explain differences in the strength of school-community relations? Are factors such as the character of principals and their ties with community leaders equally important?

Anyone familiar with the variety of new initiatives in Sri Lankan education will notice that these four problems constitute a selective list, covering only a portion of the current reforms. However, by examining these problems, the research is expected to shed light on a variety of other important areas, such as management reform at the regional and central level, teacher education, and curricular reforms.

Sampling Design

A number of considerations went into the design of the sample. Initially, it was decided to identify a common sample for the entire research project. It was clear that the sample must include variations in geographic and school conditions so as to assess the real impact of the reforms. In view of the interest in Clusters and Divisions, it was important to select a sufficient number of schools affected by these reforms to draw meaningful conclusions about their impact.

These considerations led to two major requirements for the sample:

1) To select a group of districts that contained the geographic, ethnic, and economic characteristics of the entire nation and were free of communal strife.

2) To select a representative and sufficient number of schools of each major type that were organized in clusters.

In terms of the first requirement, we decided, after much consideration, to treat the following six districts in the southern portion of the country as the universe for our research. Thus, from the perspective of statistical generalization, inferences in the report apply only to a representative area of Sri Lanka and not the whole nation.

Colombo, the major metropolitan area of Sri Lanka, center of government and commerce, some industry, and home of the most prestigious schools, including most of Sri Lanka's private schools. Only 5.2% of our sample schools in Colombo describe their surroundings as rural, in contrast with over 70% in the remaining districts. In Colombo, 12.9% of the sampled schools report that the majority of their pupils come from homes where the parents have studied up to the O/Level, and only 14.8% say that the majority of parents have not completed primary school.

Kegalle, adjacent to Colombo but inland. It includes both semi-rural areas devoted to modern industry and the informal sector as well as rural, primarily agricultural areas. Kegalle follows Colombo in the educational level of parents and in unit expenditures on schools. As with Colombo, most schools use Singhalese as language of instruction.

Bandarawela, located in the south central part of the nation, 80 miles from Colombo. It is a mountainous district with extensive highland agriculture including a number of prosperous tea plantations. Bandarawela has a diverse population, with more Muslim schools than any of the other districts. Bandarawela was also the location of some early cluster pilot projects. The large Mahaveli dam and hydroelectric project affect much of this district.

Polunaruwa, the northernmost district in our sample, is located inland and has relatively dry land. Polunaruwa is possibly the poorest of the six districts, and the population is the most dispersed. This district has an especially large number of small schools.

Batticaloa, is primarily Tamil-populated, on the eastern coast. Before the war, this district was a popular resort. The population is the least educated of the six districts with the lowest average unit expenditures.

Tangalle, located at the southern tip of Sri Lanka and almost exclusively Singhalese with an agricultural/fishing economy. Tangalle was also the location of several initial cluster experiments.

In terms of the second requirement, inclusion of sufficient numbers of each major type of school and of clustered schools within this universe, we developed six strata, based on the following factors:

Official School Types. As noted above, government standards specify four major types of schools, from Type I-AB schools, modeled on English public schools with grades from kindergarten through A/Level exam preparation, to Type III schools, which provide only primary instruction. There are wide gaps between schools of the different types. Drawing on results from our field work, it is apparent that Type III schools are more likely to be rural, to have a majority of children from poorly educated homes, lower unit expenditures, fewer students, and lower promotion rates. These differences are sizeable. One of our Type III schools has only fifteen pupils, and two-fifths enroll fewer than 100 pupils; the average unit expenditures at Type III schools are reported to be 60% of those in Type I-AB schools. Repetition and dropout rates at Type III schools are higher than those of the Type I-AB schools. In sum, there is considerable room for school improvement. Given that the reforms are intended to bring lesser schools up to the level of the best schools, we made each type a stratum in the design.

Private Schools. The elite private schools, another important type in the Sri Lankan system, are also included as a distinctive

stratum in the sample. Most of these schools are located in Colombo, Kandy, or Jaffna, and have Type I-AB status. As they receive no support from the government, they are somewhat lax in providing official statistics, so we do not have reliable figures on their characteristics. However in terms of popular reputation, these schools are on a par with the best public Type I-AB schools.

Clustered Schools. At the time of the sample, we knew that some 50 schools had been placed in the original cluster projects in Tangalle and Bandarawela, and an undetermined number of schools had later been placed under clusters in other districts. Lacking information on the number and location of the newer clusters, our goal was to select those schools in the original pilot projects. Thus we created an additional stratum composed of all clustered schools in these two districts. By the time of our survey, however, many more schools had been joined in clusters: in actual numbers, 53 of the schools in our sample were in the stratum created to insure the selection of pre-1984 cluster schools, another ten pre-1984 cluster schools were selected randomly, and 54 of the post-1984 cluster schools were selected.

After reaching a decision on the universe of the study and the strata to be used in sampling schools, we specified the number of schools to be selected from each stratum. With a target of selecting up to 50 from each stratum, we identified the respective sampling ratios. Based on these ratios, we decided on 273 schools. These 273 schools became the sites for collecting all the information reported in this study.

For the studies reporting quantitative results, weights were used which roughly reversed the effect of the proportional sampling ratios. The weighted sample consists of 1,923 cases. Although the weighted sample has 1,923 cases, all significant statistics in the text are based on the actual sample size of 273.

For the studies of school-community relations and classroom management, particular sites were selected from the full sample of 273 schools: eight rural Type III schools were selected for the classroom management study and 21 rural schools were selected for the community relations study.

Multiple Methods

Each of our four research problems posed a unique challenge for the researcher. For example, the study of Divisions and Clusters required an examination of sociometric patterns over long distances and long periods. In contrast, the study of classroom management required an intensive examination of single classrooms.

Recognizing the special challenges of each problem, the research project decided to build a common data bank as a background for the study of management reform, and then to create distinctive research strategies for each of the problems. Independent research teams consisting of both Sri Lankan and U.S. researchers developed the respective strategies. As the four studies evolved, the first two, focusing on the Division/Cluster reforms and school management practices, stressed quantitative techniques; the study on classroom management stressed case studies; and the study of school-community relations combined the two approaches.

Major Concepts and Their Measurement

The teams concerned with Divisions/Clusters, school management, and school-community relations joined forces to create joint questionnaire, survey, and observation instruments. These instruments were field tested and then refined to improve clarity and coverage. Once refined, they were administered from January to September 1987. Field work required a fairly long period, as violent communal riots troubled the countryside during much of 1987. Information from field work was used to develop measures of key concepts. In addition, we drew on recent school censuses to measure particular concepts and check reliability.

Indicators of Pupil Behavior

It was particularly difficult to develop adequate measures of student outcomes. The reform documents make no mention of evaluation or of the expected outcomes of reform interventions. It is not altogether surprising that questions concerning the outcomes of school improvement were not raised in a more persistent way. First, the management reforms assumed that the changes would lead to improvements for pupils, but specific outcomes were of less importance than the more immediate task of implementing the management reforms. Second, as will be indicated shortly, it is unusually difficult, given the

circumstances of basic education in Sri Lanka during these reforms, to develop meaningful measurements of improvements in the status or achievement of pupils.

Evaluations of the relation of pupils to basic education schools usually cover concepts such as access and retention, efficiency, promotion to higher levels, and quality. For this study, the research effort was limited to those indicators that could be obtained from the schools or that were otherwise available; it did not prove feasible to develop any new measurements such as a nationwide achievement test. The following are some of the complications encountered in each of these areas.

Access and Retention

In Sri Lanka access at the basic education level is already near universal, so a potential measure of access might be to determine the proportion of dropouts in different schools. The standard approach is to calculate differences in enrollments across succeeding years, accounting for repeaters and promotions. However, two processes contaminated the calculations during the period of reform: (1) despite regulations to the contrary, large numbers of students voluntarily left one school for another during or between years, and (2) as a result of the reforms' concern to rationalize the use of teachers and buildings, some schools gained whole grades of pupils while others lost grades. These shifts, which affected over 20% of the schools in our sample, made it impossible to compute dropout rates.

Internal Efficiency

Several important efficiency measures focus on repetition. A small number of Sri Lankan pupils repeat their grade level each year, usually because they do poorly in their academic work but sometimes to be better prepared for a challenge such as a major exam (the grade five scholarship exam). As schools keep clear records on the number of pupils who repeat, it is possible to use these figures to compute a measure of efficiency: dividing repeaters by the number of pupils in the school in the same academic year. Dividing repeaters by the number of pupils for another year may lead to anomalies as some schools lose or gain grades, or as students move from school to school.

Quality

The only comparative indicators of quality come from the pupil performance on the grade five scholarship exam (GFSE). The exam is developed at the national level, and thus the scores obtained by any pupil on the island can be compared to any other. But the ways in which schools and districts implement this test make it somewhat difficult to interpret the significance of school level indicators.

One school level indicator might be the average score of students on the test. However, only a fraction of all fifth graders take the test. In some schools the principals urge all students to take the test, while in other schools only the brightest are encouraged. In yet other schools, as was evident in several of the best schools where children come from affluent homes and are thus not entitled to a scholarship, the principal may discourage pupils or forbid them to take the test. Thus the average test scores have an unclear meaning. In that most schools take the middle road, urging all interested students to take the test, it can be assumed that the average score on the GFSE is at least a rough indicator of the quality of education in a school. The major limitation is that in nearly one fifth of the schools, no one takes the test, and hence these schools cannot be compared with the rest.

The proportion of children from a school who pass the exam might be another indicator of quality, but here again there are problems:

First, as indicated above, not all eligible students take the exam. The question then arises as to which proportion is most meaningful; the proportion of those taking the exam who pass, or the proportion of those eligible to take the exam who pass? Assuming that most principals would encourage their best students to take the exam while some would discourage their weaker students, the more appropriate focus would be on the number of students who pass in relation to the total number of eligible students. This is the indicator used here.

Second, passing scores are set by districts, and some schools are allowed a more generous cut-off. Thus, schools from poor areas have a somewhat inflated pass-rate in relation to all schools. Moreover, while pass rates for schools in a given district are comparable, those across districts are less so.

Finally, the purpose of the exam is to select a few exceptionally able pupils for scholarship assistance.

In most districts the cut-off is set so high that only about 5% of those who take the exam pass. In many schools, no children, or only one child out of a large class, may pass. Given these weaknesses, the proportion of students passing turns out to be one of the poorest indicators of pupil behavior.

Proportion Taking Scholarship Examinations

Distinct from how well students do is the chance schools give their students to advance in their studies. In the very best schools, this factor is largely irrelevant, as most children are from relatively affluent homes, and will advance regardless of their performance on the exam; such schools reserve places in their attached secondary schools for their primary students who demonstrate a reasonable level of proficiency. However, in most schools the very act of encouraging a child to take the exam contributes to the child's self esteem and desire for further learning. While the proportion of students taking an exam is not a very good indicator of quality, it does reflect the degree to which a school encourages its students. This measure has little bias across districts.

Promotion

A final indicator of student outcomes is the proportion of grade five students who move on to grade six instead of discontinuing their schooling. In Sri Lanka, this proportion is high at all schools, even though indicators of quality and support vary.

O/Level Pass Rate

Many schools in our sample include grades beyond the primary level; over one-third include the full range of courses extending through the tenth grade, which prepares pupils for the Ordinary Level examinations. Yet another indicator of quality is the proportion of pupils who pass the O/Level exams out of those who take them. All districts use the same standard, and most eligible students take the examinations; thus proportions are comparable across schools.

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A program of:
USAID, Bureau for Science & Technology

Directed by:
The Harvard University Institute for International Development
and the Harvard Graduate School of Education

In Cooperation with:
Academy for Educational Planning and Management, Pakistan
Centre de Perfectionnement et de Formation en Cours d'Emploi, Burundi
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